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### ABSTRACT

This publication compiles materials related to the October 13, 1999 public hearing before California State senate committees concerning the misuse of standardized test scores in deciding admissions to college. Section I, "Introduction," contains the hearing announcement, agenda, and a background paper. Section II, "U.S. Department of Education Office for Civil Rights," contains a prepared statement on the appropriate use of tests for high-stakes decisions, along with draft documents on test use and non-discrimination. Section III, "The College Board Reports," provides data on the state's Advanced Placement (AP) Challenge and 1999 California SAT scores. The last section contains reprints of relevant news articles. (EV)

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### **CHAIRS:** SENATOR TERESA P. HUGHES SENATOR DEDE ALPERT

Joint Hearing of the

SENATE SELECT COMMITTEE ON HIGHER EDUCATION ADMISSIONS & OUTREACH and the

SENATE COMMITTEE ON EDUCATION



### THE DANGER IN OVEREMPHASIZING THE **USE OF SCHOLASTIC ASSESSMENT TESTS (SATS)** AS A TOOL FOR COLLEGE ADMISSIONS

Wednesday • October 13, 1999 10:00 am - 1:00 pm State Capitol • California Room 4203 Sacramento • California

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### CALIFORNIA LEGISLATURE

STATE CAPITOL SACRAMENTO, CALIFORNIA

The Senate Select Committee on Higher Education Admissions & Outreach and the Senate Committee on Education cordially invite you to attend a joint hearing:

The Danger in Overemphasizing the Use of Scholastic Assessment Tests (SATs) as a Tool for College Admissions WEDNESDAY, OCTOBER 13, 1999, 10:00 a.m. – 1:00 p.m. State Capitol, California Room #4203 Sacramento, CA

As we begin the new millenium some 500,000 more Californians than are currently enrolled in the State's colleges and universities will seek access to postsecondary education. Along with this Tidal Wave of new students comes a shift in the ethnic/racial composition of individuals seeking access to these universities. Yet, with the continued growth in the student population and changing demographics, the numbers on university campuses in representation of students from the rural regions and those with diverse backgrounds are stagnant and in some cases are declining in growth.

California's social and economic future is critical to ensuring that equitable educational opportunities are available for all students, particularly those from backgrounds largely absent in the past from our colleges and universities.

The purpose of the hearing is to provide public awareness and information on court decisions and professional guidelines concerning standardized test score misuse.

The hearing is open to the public. To RSVP or for more information, please call Carolyn Robinson at 916.322.4400.

MEMBERS

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ON
HIGHER EDUCATION ADMISSIONS
AND OUTREACH

TERESA P. HUGHES CHAIRWOMAN

### JOINT HEARING SELECT COMMITTEE ON HIGHER EDUCATION ADMISSIONS & OUTREACH AND SENATE COMMITTEE ON EDUCATION 10:00 a.m. to 1 p.m.----State Capitol----California Room 4203

### THE DANGER IN OVEREMPHASIZING THE USE OF SCHOLASTIC ASSESSMENT TESTS (SATs) AS A TOOL FOR COLLEGE ADMISSIONS

### **AGENDA**

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Charles Ratliff, Deputy Director
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Michael Beseda, V.P. Enrollment Services Saint Mary's College

### RAISING EDUCATIONAL ACHIEVEMENT

Alternative Solutions and Strategies
Dr. Raymond L. Orbach, Chancellor
University of California, Riverside

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Examining Access to AP Preparatory Courses Mark Rosenbaum, Attorney & Litigator American Civil Liberties Union (ACLU)

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**CLOSING REMARKS** 

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SENATE SELECT COMMITTEE
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AND OUTREACH

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### **Background Paper**

The Danger in Overemphasizing the Use of Scholastic Assessment Tests (SATs) as a Tool for College Admissions

Public Hearing October 13, 1999 State Capitol, Room 4203 10:00 a.m. - 1:0 p.m.

### Prior Legislation in this Area

Senate Bill 1758 (Torres, Chapter 1505, Statutes of 1984) requires that sponsors of standardized tests administered to over 3,000 students in California for college admissions or placement purposes file with the California Postsecondary Education Commission a financial statement, copies of test with answers, and data relative to tests administered in California.

### **Purpose**

The purpose of this hearing is to examine the utilization of standardized testing in undergraduate eligibility and admissions at California's public universities. Previous hearings have addressed admissions policies, outreach and eligibility and the community college transfer function. This hearing will address the background, purpose and utilization of the SAT with particular focus on how they relate to the definition of who is "eligible" to attend the California university systems. It will include a discussion of whether the tests contain biases, how well they predict college performance and what effect the examinations have on students preparing for college. The Committee will seek information from test developers, university admissions administrators as well as standardized testing researchers who will give different perspectives on the use and impact of these standardized tests on potential college attendees.

### The Issues of Merit and Access

Social policy debate concerning issues such as crime, welfare reform and employment cannot be discussed honestly without consideration of access and equity to educational opportunity. A 1997 report released by the California-based Rand policy center stated, "The college degree has replaced the high school diploma as the entry card into productive employment. If this degree is increasingly out of reach for large segments of the Californian populations, then a revolution in education is essential to avert increasing social unrest."

The need to define merit cannot be appreciated unless considered in the context of the 1994 Richard Hernstein and Charles Murray best-selling study, *The Bell Curve*. Their controversial book, based on their analysis of results from a standardized military test for aptitude, argued that intelligence varied between racial groups and that lower levels of intelligence for African-Americans and Latinos presumed the lower social class positions that they disproportionately occupy. Scholars such as Stephen Jay Gould and Howard Gardner, both of Harvard, have done extensive work refuting these arguments about biological determinism and the existence of a single, unitary "intelligence." A book titled *Inequality by Design* by six Berkeley sociologists specifically attacked the methodology and statistical analysis of the *Bell Curve*'s results. Yet there remain lingering perceptions that standardized assessment tests such as the SAT measure intelligence. Conceptions that certain racial groups have innately lower intelligence and do not have the capacity to fully benefit from higher education continue to pervade to a larger degree than is generally acknowledged.

Driven partly by Americans' fascination with quantifying and measuring what is the best or who is the most intelligent, these tests may have become a self-fulfilling prophecy. The popular, but often criticized, *U.S. News and World Report* college ranking gives preference to selectivity and high median SAT range to rank universities. Though not widely accepted by universities, this report is often referenced by both high caliber prospective students in making college decisions and by alumni in making donation decisions. Therefore for the university to increase quality they are compelled to select high SAT scores and reject many.

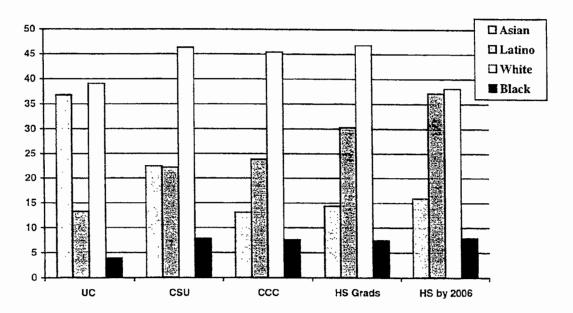
The long-standing use of standardized test scores and high school academic achievement to determine who is granted admissions to universities has been vastly complicated by the incredible increase in admissions competitiveness, allegations of test biases, the societal shift toward information-based and service-oriented industries, dramatic demographic changes in population and the current and historical underrepresentation and exclusion of certain groups of Californians. Peaking at 2.1 million enrollment in 1989 and 1990, California's three public postsecondary institutions have maintained fairly consistent populations for the last ten years with California Community Colleges(CCC) enrolling around 1.3 million students, California State University(CSU) at 330,000 and the University of California enrolling 162,000. With post-recession population resurgence, the California Postsecondary Education Commission (CPEC) projects that 455,000 more high school graduates will seek higher education by the year 2005 with 1.2 million more awaiting at the K-12 level.

The inflation of states' out-of-state tuition fees mirror the exponential rise of private college tuitions, which average over \$25,000 per year, and put almost all out-of-state public universities in a like price range for Californian students. The widely respected and high quality University of California(UC) and California State University(CSU) systems are considerable bargains at less than \$4,000 per year and less than \$3,000 per year, respectively, and are the only university education that most Californians can afford, without incurring substantial debt.

Considering that a university degree is often necessary for professional opportunity and social mobility, the disparity in education amongst certain Californian populations is likely to lead to only further inequity in the workplace and in positions of power and wealth. Currently, Asian-Americans(36.8%) and White(39.1%) compose over three-quarters of the enrollment at the UC while Latinos are less than (13.3%) and African-Americans less than(3.9%) attend the UC at rates that are around half of their representation amongst California high school graduates. Of the over 250,000 public high school graduates, 46.8% are white, 30.3% are Latino, 14.4% are Asian and 7.5% are Black. By 2006, these numbers will be 38.1% White, 37.2% Latino, 15.9% Asian and 7.9% Black.

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### PERCENT OF ENROLLMENT BY RACIAL CLASSIFICATION



If such enrol!ment numbers continue to persist, California will move toward a segregated society with non-college educated Blacks and Latinos filling the underclass and Whites and Asians disproportionately represented in middle and upper classes. Many university professors come to teach in California precisely for its diversity and the intellectual value of different perspectives and learning from alternative cultural models. If California does not have diversity to offer, what will be its distinction? What might a non-diverse student body and academic community lose?

Who deserves to attend a university? With expanding demand and little growth in supply, public higher education might be equated to a precious resource. How should California decide to allocate this resource and should it be spread evenly amongst all citizens? Should California universities select: (A) all the best students by academic records(Berkeley has more than enough applicants with 4.0 GPAs to fill its entire incoming class), (B) the students with most potential to benefit from an education, (C) a diverse body of students from different backgrounds who each have some unique talent or ability to offer the university, or (D) those who are most likely to make a contribution to their communities and the well-being of society?

What constitutes merit? This question produces a range of responses. Some answers may emphasize scholastic and test achievement factors such as prior academic achievement, potential for good grades in college, or achievement despite rigorous academic standards. Others take a more holistic approach and desire qualities such as potential for life success, leadership and involvement along with good grades and test scores, unique abilities or talents beyond academic skills, or cultural and language competency. A utilitarian seeking the greatest good might seek to remediate past injustice and discrimination, value achievement despite disadvantage, or grant access to those in greatest need to provide for family or community.

If a disadvantaged individual is likely to grow up in an underresourced educational system, not qualify for college admission and lose the ability to obtain a higher paying job that will allow him or her to leave the disadvantaged community --what, if not providing educational access, can or should be done to stop this cycle?

### Focus of the Senate Select Committee on Higher Education Admissions and Outreach

The focus of the Senate Select Committee on Higher Education Admissions and Outreach is to examine historical inequalities and the current disparities regarding the decline in access to public universities. The means by which the Committee has chosen to address this growing problem is to conduct public hearings within the educational community. The first hearing focused on admissions. The second hearing focused on outreach and eligibility and the third hearing examined student transfer and articulation. The function of the Committee is to explore and develop policy alternatives and recommendations for redefining the admissions policy for the California State University and the University of California with an emphasis on ensuring that broad-based higher educational opportunities are available to all Californians.

### California Post-Secondary Education Commission

Within the last six months, the California Postsecondary Education Commission released the eighth in a series of "Eligibility Studies" that began in 1955. The report is useful in understanding what percentage of high school students are fulfilling the basic college admissions requirements and are "eligible" to attend a California public institution of higher education. This eligibility study has raised the eyebrows of many concerned with California's higher education system. According to their mission statements, the UC is suppose to serve the top 12.5% of all California high school graduates while the CSU should cover the top 33.3% of graduates. The 1990 study showed that the CSU had an eligibility of 34.6% and the UC was below its target at 12.3%. The surprising discovery of the 1996 eligibility study, in comparison with the 1990 study, was that these number dropped dramatically with both systems below their guidelines.

High School Student Populations Transitioning to College

CA High		CSU Eligible		UC Eligible
School Graduates	⇒	76,714	⇒	28.767
259,170 ↓		Ų		U.
Missing Courses and		Enroll at CSU		Enroll at UC
Tests 89,672		20,587		18,314
Missing A-F				
Courses 44,836				

1996 Eligibility Rates of Different Groups				
University of Ca	University of California(12.5%)		California State University(33.3%)	
All	11.1%	All	29.8%	
Men	9.7%	Men	21.8%	
Women	12.6%	Women	29.7%	
White	12.7%	White	36.3%	
Asian	30%	Asian	54.4%	
Latino	3.8%	Latino	13.4%	
Black	2.8%	Black	13.2%	
Urban	10.3%	Urban	26.7%	
Rural	7.1%	Rural	26.7%	
Suburban	13.0%	Suburban	32.4%	

### Notable:

- Only 3.9% of Latinos are eligible to be admitted to UC although they compose 30.3% of the graduating seniors.
- Even though both the UC and especially the CSU increased their requirements, the number of students completing college preparatory programs increased again.
- An extra 10.8% of students might be eligible for UC if they took the SAT tests.
- Of those eligible to attend, 78.7% of Asians enrolled, 98.9% of Blacks, 75.9% of Latinos enrolled while only 41.7% of whites did.
- Found that 5.2% of applicants were ineligible by index(not having high enough SAT scores to compensate for marginal GPA) while only 3.8% benefited from their index(SAT score.)

### History of SATi

According to the College Board, the proprietors of the SAT, the impetus for the use of standardized testing in university admissions began with Juan Huarte de San Juan, a scholar who made the recommendation to the King of Spain in 1575. Some historians point to Horace Mann, who many would call the father of the American educational system, as instilling the idea of standardized exams and assessment tests. Still others begin with Columbia's introduction of the Thorndike Tests in 1917 which began the era of using military-developed intelligence tests to base admissions decisions.

In the 1870s, Harvard and Yale began to administer their own entrance exams but as other schools followed suit it became readily apparent that a universal exam was needed to save applicants from travel expense and repeated test-taking. In 1900, the admissions personnel formed the College Board to create and administer exams. Originally, the tests were essay exams in subjects ranging from English, Greek, Latin, and Spanish to botany, math, history and drawing. Between 1890 and 1924, the growth in college enrollments increased at a rate five times the rate of population growth. Immigration had its effect, particularly in New York, where over half the public high schools children were eastern European Jewish students. For Columbia

College, their policy to admit those who had completed the necessary Regent's work in secondary school had dramatically altered the composition of their undergraduate class. The president, dean, director of admissions and faculty were all horrified by the numbers of "unrefined", "clannish" and "less intelligent" Jewish students and worried about their threat to academic prestige and university values.

In order to help weed out those of lower intelligence who did not have the possibility of succeeding, Columbia College started administering the Thorndike Tests for Mental Alertness which they borrowed from the Army. Historians might remember this as a time in which scholars, dominated by Eugenists and Social Darwinists, believed that intelligence was an inherited trait that was largely correlated with moral character, worried about contaminating the gene pool and feared wasting education on those with "low potential." The Thorndike test did have some success in predicting college failures as those who measured in the lowest percentiles.

The World War II induced plans for year-round school and longer, bulkier essay exams were dropped for the one-day SAT in 1942. By 1947, the Educational Testing Service, composed of university professionals, had been formed to administer and research the test while College Board reverted to policy procedures and reporting data. During this time, ETS President Henry Chauncey spoke frequent to the academic community and denounced the poor quality of K-12 education. He warned of wasted educational resources on individuals of low talent and promoted the use of the SAT as means of sorting out potential and retaining high standards.

With the 1960's and the Civil Rights movement, ETS advocated the SAT in the 1960's as an objective measure of merit that insures every test taker an equal opportunity to succeed. The SAT was recommended as a starting point for equality because it measured solely by academic ability and was blind to race and poverty. The Government's Civil Service system of hiring and promotion also created a demand for assessment through testing. From 1948 through 1972, ETS revenues increased 25-fold.

The ideal of basing selection decisions on merit is sill the guiding principal to this day. While the formation of the National Center for Fair and Open Testing in the 1970's and the publication of books such as Allan Nairn/Ralph Nader's *The Reign of ETS*, David Owens' *None of the Above*, and James Crouse and Dale Trusheim's *The Case Against the SAT* have focused some criticism against the SAT, the test is still widely accepted.

### College Boardii

### The Purpose of the SAT

"The SAT was originally intended to provide some redress for possible errors and inconsistencies in secondary school records and in the results of the essay examinations of the 1920s and 1930s, which are tailored to highly specific curriculums. By stressing the direct measurement of basic developed abilities, the test allowed a more balanced assessment of the student who had limited exposure to these specific curriculums. Further, it could help to identify the underachiever."

"The SAT is not intended to be used as the sole criterion for admission to college; rather, it is designed to supplement the high school record and other information in assessing a student's competence for college work."

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"The SAT serves as the common yardstick in the admissions process so that colleges can equitably compare the abilities of all applicants. In California where there are more than 2,000 high schools, it would be extremely difficult for admissions counselors to evaluate candidates solely on the basis of high school records due to the variation in grading standards from high school to high school and even within the same school from one teacher to another."

"SAT scores are intended to predict future academic performance, and they do, as the validity evidence demonstrates. The SAT measures aspects of developed ability, rather than innate characteristics. Even though the information testing in the SAT is relatively curriculum free, students must have had experience with the skills being tested. An aptitude test points toward future performance; an achievement test may be used in this way, but assesses past attainment."

### SAT II

Subject Tests are one-hour, multiple-choice tests graded on a 200-800 scale.

"The SAT II: Subject Tests are designed to measure knowledge in specific subject areas and the student's ability to apply that knowledge. Subject Tests are independent of particular textbooks or methods of instruction. Although the types of questions change little from year to year, the content of the tests evolves to reflect current trends in high school curriculums. Students can take Subject Tests in such diverse content areas as writing, literature, language, math, science, and history."

The Writing Test has a 20-minute writing sample and 40 minutes of multiple-choice questions. The Language Tests include Chinese, French, German, Japanese, Korean, Spanish, and the English Language Proficiency Test (ELPT) and include a 20-minute listening section and a 40-minute reading section. The Mathematics Level IC and IIC Tests have some questions that require the use of a calculator, at least at the level of a scientific calculator. Mathematics I (without a calculator) is being phased out in 1998.

### THE ACT

While the SAT has been administered since 1926, the ACT was first founded in 1959 by E.F. Lindquist, a professor of educational measurement and statistics at the University of Iowa. While serving as a trustee of the College Board, Professor Lindquist objected to the manner in which the SAT was being developed as an aptitude test and preferred to assess "critical reasoning" ability in the skills and knowledge developed in high school curriculum. Instead of breaking up the test into Verbal and Quantitative sections, the ACT contains English, Reading, Mathematics and Science Reasoning.

While some selective schools including certain Ivy league institutions openly "prefer" SAT I scores over ACT, nearly all institutions that required standardized test scores allow for either. It is estimated that the California breakdown of scores submitted is 80% SAT and 20% ACT. Almost everyone takes the SAT, in part because of the PSAT's tie to potential scholarships, but some choose to submit ACT scores if their score would equate with a higher SAT score. Some universities take the highest score while others will average multiple tests or take the most recent.

SIDE-BY-SIDE COMPARISON OF SAT AND ACT			
SAT	ACT	CATEGORY	
1926	1959	Founding Date	
over 2 million	1.8 million	Estimated Number of Users/Year	
West Coast,	Midwest, South,	Most Prevalent In	
East Coast	Rocky Mountain	Geographic Region	
Aptitude	Assessment	Type of Measurement	
\$22.50	\$20	Cost to Take Exam	
400-1600	1-36	Score Scale	
Verbal, Math	English, Math,	Sections	
	Reading, Science		
Partial Credit	No Penalty	Guessing	
Deducted			

### **FairTest**

The National Center for Fair and Open Testing(FairTest), founded in 1985, is "an advocacy organization that works to end the abuses, misuses, and flaws of standardized testing and to make certain that evaluation of students and workers is fair, open, accurate, accountable and educationally sound." The group operates on four basic principles:

- 1. Tests should be fair and valid.
- 2. Tests she uld be open.
- 3. Tests should be viewed in their proper perspective.
- 4. Alternative assessment instruments should be developed.

### Among FairTest's arguments:

- THE SAT IS NOT AN ASSESSMENT OF HIGH SCHOOL PERFORMANCE. As a descendant of questionable intelligence tests of the 1920's, the SAT was designed to be independent of high school curricula unlike the ACT.
- THE SAT MEASURES THE VAGUE IDEA OF "APTITUDE." It's 138 analogies, sentence completions, reading comprehension, standard math and quantitative comparisons are limited assessments as multiple-choice questions.
- THE TEST IS NOT A "COMMON YARDSTICK." If favors wealthy suburban schools over poor urban schools, men over women, and those with well-educated parents over those without.
- THE SAT DOES NOT ADD TO PREDICTIVE VALUE OF HIGH SCHOOL GPA. More than 90% of admissions decisions are the same whether using just high school GPA or both GPA and SAT. Most colleges accept over 70% of applicants and do not need the SAT to limit the number of applications that will need to be reviewed.
- THE SAT IS FREQUENTLY MISUSED. The College Board states that SAT score should not be the sole factor in admissions but many schools use indexes that have cutoffs for certain levels of SAT and GPA. The minimum score for athletes, academic-enrichment programs and the selection of National Merit Scholarships are also examples of abuses.

- ADMISSIONS DEPARTMENTS CAN LIVE WITHOUT THEM. Nearly 300 colleges have made the test optional in their admission including prestigious and highly selective schools. Two of them, Bowdoin and Bates, have implemented the policy for 10 years and reported greater diversity without a drop-off in academic quality. Less than 25% of students choose not to submit scores. The comparably diverse, large state-system, University of Texas, is currently implementing a policy of automatically admitting the 10% of high school students.
- RESEARCH REPEATEDLY INDICATES CONSISTENT GENDER BIAS. Females consistent have higher high school and college grades than males yet their SAT scores are 40 points lower than men.
- THE SAT IS UNFAIR TO MINORITY AND IMMIGRANTS STUDENTS. Research has shown that the speeded nature of the test places an unfair burden on those for whom English is a second language. Many questions are worded so as to confuse and trick test-takers into guessing the wrong answer. Some question are based on mainstream cultural assumptions and can be interpreted to have multiple "correct" answers.

### **Princeton Review**

Began in 1981, the Princeton Review had been bold in its criticism of the SAT and claims to undermine the unfairness of the test by proving it can raise SAT scores significantly. The company states that it is the largest and fastest growing in the burgeoning test preparation industry which includes rival predecessor Kaplan. Over 60 centers throughout the country serve over 70,000 students for cost ranging from \$700-1100. The Review published an SAT guidebook called "Cracking the SAT" which has been on the *New York Times* Best-Seller List and has been involved in lawsuits directed against ETS as well as a Kaplan suit against the Review's promotional material.

The test preparation courses usually run for six weeks for about seven hours a week. The preparation involves personal instruction as well as testing exercises and includes at least four simulated tests with real SAT questions from previously administered exams. Much of the focus is involved in understanding the test format and informed guessing. Test-takers are given constrained time to finish each section, courses shortcuts and cues that can lead to correct response without knowing the answer. Since the Math section does not involve questions beyond basic arithmetic, algebra and geometry scores, the Review teaches that scores are differentiated by using complicated wording to mislead test-takers. For the Verbal Section, the Review focuses on teaching frequently tested vocabulary words, common word relationships that ETS is seeking and teaching to read for answers are emphasized.

Prine	Princeton Review Enrollment and Score Improvement for California since 1985				
Year	# of Students	Avg. Score Improvement	% Change in Enrollment Since 1985		
1985	470	147	N/A		
1990	2600	150	453%		
1995	4600	145	879%		
1996	5035	143	971 <i>%</i>		
1997	5683	144	1109%		

### LATINO ELIGIBILITY STUDY

After the 1990 CPEC eligibility report which reported that only 3.8% of Latinos in the state of California met the "eligibility" requirements to attend a UC institution. UC President David Gardner directed a group of 15 UC faculty members, headed by Dr. Eugene Garcia of UC Berkeley, to conduct a study of possible alternatives to increase the representation of Latino students at the UC. In July of 1997, six years later, the Latino Eligibility Taskforce released their report. (Note: Many, including media, have wrongly interpreted the report and recommendations as a direct reaction to the elimination of affirmative action.)

- The report stated that Latino enrollment at the highly selective UC Campuses (Berkeley and UCLA) is projected to drop by 70% when race is not considered in admissions.
- The report found that the SAT has virtually no added predictive value for Latino students over admissions based decisions solely on GPA.
- The report recommended that the SAT be made optional and the Golden State Examinations, a curriculum-based state assessment, be considered in its place.

### SAT FACTS AND FIGURES

	1997 SAT I Scores on (200-800 Scale)			
	Average SAT I Verbal Score		Average SAT I Math Score	
	Men	Women	Men	Women
Asian-American	498	494	578	543
White	528	524	545	510
Latino	456	448	478	444
African-American	431	436	433	416

Correlation Between Income and 1994 SAT Score		Correlation Between Income and 1991 SAT Score		
Family Income	Combined SAT I Score	Family Income	Combined SAT I Score	
\$70,000 or above	1000	\$70,000 or above	997	
\$60,000 - 69,999	948	\$60,000 - 69,999	949	
\$50,000 - 59,999	929	\$50,000 - 59,999	931	
\$40,000 - 49,999	911	\$40,000 - 49,999	910	
\$30,000 - 39,999	885	\$30,000 - 39,999	884	
\$20,000 - 29,999	856	\$20,000 - 29,999	856	
\$10,000 - 19,999	812	\$10,000 - 19,999	813	
Less than \$10,000	766	Less than \$10,000	768	

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### Relevant Questions Concerning SAT and ACT Use

- 1. What is the purpose of utilizing standardized tests in university admissions? (1)to measure who has the greatest potential of success in college(and/or after), (2)finding out who has the most academic (or possibly intellectual) aptitude, (3)an assessment of academic qualifications, (4)a tool to find out measure grade-relativity and weed out applicants with inflated grades or (5) as an administrative tool used to narrow the enormous volume of applications that are received every year?
- 2. Many educators speak commonly of "teaching to the test." Multiple choice test questions are by their nature limited and prone to guessing and cheating. Current educational models seek depth and critical understanding from students yet multiple choice tests encourage exactly the type of rote memorization that teachers seek to limit. With a short amount of time and a large number of questions, the SAT and ACT focus on quantity not quality and on getting as many as possible right instead of everything right. What effect have multiple-choice styled tests had on learning and judgments of success? Is the process of studying for and repeatedly taking the SAT and ACT a constructive use of student time? What, if any, other learning might be sacrificed for these tests? Or are these test skills important for future college or life experiences?
- 3. Given the tremendous competition for admissions to universities and the widely distributed statistics that show the median SAT of admittees for a particular college, some students with low test scores don't bother going through the length process of applying and paying the \$50 application fee for schools with higher median SAT scores. How is this unmeasured variable reflected in eligibility pools and non-admission rates?
- 4. Although not formally endorsed, many high school students who must take these exams to apply to a university gain the impression that these test scores measure intelligence and individual potential. Stanford Psychology Professor Claude Steele has shown that women and blacks that are told their groups underperform on these tests do in fact underperform when compared to a control group? What effect might this have on college performance?
- 5. With the test coaching industry growing exponentially, the substantial costs of these courses and the documented results that show dramatic increases in scores, what can be done to equalize this advantage for more affluent students?
- 6. Given the size and number of applicants that apply to the California University Systems and the fact that College Board administers the test free to universities, what cost-effective alternatives are available or could be developed for admissions personnel to use in place of these tests?

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Select Committee on Higher Education Admissions & Outreach

<sup>&</sup>lt;sup>1</sup> Taken extensively from James Crouse and Dale Trusheim's The Case Against the SAT (1989).

ii Abbreviated from Briefing Paper Submitted to the Select Committee.

### U.S. DEPARTMENT OF EDUCATION OFFICE FOR CIVIL RIGHTS

United States Commission on Civil Rights
Public Briefing
Prepared Statement of Arthur L. Coleman
Deputy Assistant Secretary
U.S. Department of Education Office for Civil Rights
June 18, 1999

### Introduction

Thank you for the opportunity to represent the U.S. Department of Education and to discuss the existing legal, educational and test measurement principles that guide the work of the Department's Office for Civil Rights ["OCR"]. All individuals making important high-stakes decisions affecting the lives of students should understand the central principles on which so many in the education community agree. These points of agreement provide a very fertile common ground that should be the basis of our efforts to ensure that tests are used appropriately and that, as a consequence, accurate educational decisions are made—permitting all students achieve to their full potential.

Our goal is to provide some critical foundations for fulfilling the promise of the new civil right identified by U.S. Secretary of Education Richard Riley in his commemoration of the 45<sup>th</sup> anniversary of the *Brown v. Board of Education* decision. He said: "A quality education must be considered a key civil right for the 21<sup>st</sup> century." That point of consensus, along with the common ground that exists regarding good testing policies and practices, provides an important context for this discussion and affirms the need to move from the polarizing, either-or rhetoric that too frequently surrounds this issue. Secretary Riley has noted that too often in education, people are "choosing sides, not solutions." We seek to promote educationally sound solutions through our work related to the use of tests as foundations for high-stakes decisions affecting students.

When we talk about promoting the goal of achieving high standards education for all students, we mean it. The issue of testing in education should not be about favoring either standards or equity. Neither should the issue of testing in education be about blanketly favoring or opposing tests.

We believe that high standards for all means high standards for all. We believe that good test use practices advance high standards learning and equal opportunity—just as educationally inappropriate uses of tests do not. Tests are, as Secretary Riley has said, "important tools for educators to assess and assist students as they strive to meet high standards." And, as they often provide a meaningful picture of educational opportunities provided to students, our goal is to preserve these critical measures of student performance just as we work to ensure that they are used appropriately.

We believe that the use of tests in education is an issue that should be the subject of informed and constructive dialogue. We welcome the opportunity today to continue our effort to advance a constructive discourse that can result in educational excellence for all students.

### OCR's Work Regarding High-Stakes Decisions and the Use of Tests

The recently published High Stakes: Testing for Tracking, Promotion, and Graduation (National Research Council, Heubert and Hauser, eds., 1999) observed that the controversy surrounding the use of tests for high stakes decisions affecting students is often based upon misinformation and misperceptions about what tests are designed to do and, correspondingly, about good (and bad) test use practices. The application of federal non-discrimination laws to testing practices is subject to the same fate of misinformation—and sometimes, ill-informed commentary. To promote a better understanding and better practices regarding the use of tests for high stakes purposes, the

OCR is developing a resource guide for educators and policymakers. The guide will describe the existing non-discrimination, educational and test measurement foundations relating to the use of standardized tests that confer educational benefits to students.

Educational stakeholders at all levels have come to us requesting advice and technical assistance in a variety of test use contexts, particularly as states and districts increasingly use tests as part of their standards based reforms. And, we are addressing testing issues in a broader and more extensive array of complaints of discrimination filed with our office. These corresponding developments confirm the need to provide a useful resource that will capture legal and educational principles, references and resources to assist educators and policymakers.

We have worked with literally dozens of educator, parent, teacher, business, policymaker and testing groups and individuals to solicit input and advice regarding the scope, framing and kinds of resources to include in the guide. Notably, we have contracted with the National Academy of Sciences Board on Testing and Assessment, which has independently reviewed and which will again assess this resource to ensure that it comports with professional standards.

Perhaps the controversy that has surfaced in the wake of our extensive outreach was unavoidable. Nonetheless, we are perplexed that some of the central principles were considered by a few individuals to be novel and that the document was read by certain individuals to be something that it is not. Our effort should be understood in the clearest of terms. It is not our aim to establish standards or definitions of merit for educational institutions, as some have claimed. Nor is our effort to advocate for the elimination of standardized tests, such as the SAT. The draft of the guide reaffirms this point, in one instance stating: "[h]igh quality assessments can make high standards meaningful." Instead, our effort is straightforward: to

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explain existing legal and test measurement principles and to provide a collection of related resources—all in an effort to promote accurate decision making affecting the educational opportunities for all of our students.

### Identifying and Debunking Some Myths

The misperceptions and erroneous understandings of test use principles that led to some of the controversy that has surfaced in recent weeks calls to mind the admonition by Nancy Cole, the president of the Educational Testing Service. Presciently, she has reminded us with regard to testing policies and practices that "we must acknowledge the myths that seem[] to make the issues simpler...even though acknowledging these myths makes finding solutions even more difficult." (Cole, Merit and Opportunity: Testing and Higher Education at the Vortex, 1997). Given some of the inaccuracies regarding our ongoing work, it is an appropriate time to acknowledge—and rebut—some of the myths regarding federal non-discrimination standards and principles of sound test use.

### Myth One: The goals of excellence and equity are irreconcilable. FALSE, as a matter of law and policy.

The view that the goals of establishing standards (as in, for instance, establishing a standard of merit in college admissions) and complying with federal laws designed to ensure non-discrimination are inconsistent is, simply, erroneous. Indeed, if the federal courts teach us anything it is this: compliance with federal non-discrimination standards rests, in the first instance upon the school's educational judgments, to which deference is appropriately given. Correspondingly, the ultimate question upon which the federal legal analysis affecting the use of high-stakes tests depends is one of educational sufficiency: is the test valid for the purposes used? Are the inferences derived from test scores, and the educational judgments based on those inferences, accurate and fair?

The educational foundations that guide any federal legal analysis suggest that policies promoting excellence can be and should be fully aligned with the promotion of equal opportunity for all students. For the hope of a high standards education for all students to become a reality for this generation of test-taking students, we must insist on high standards for tests that have consequences for students—just as we do for schools, teachers, and the students that they teach. As foundations for the judgments that shape the lives—and lifetimes—of students, these tests must be used in ways that accurately reflect educational standards and that do not inappropriately deny opportunities to students based on their race, national origin or sex.

### Myth Two: Significant disparities in the test performance by subgroups of students indicate that the test discriminates illegally. FALSE, as a matter of law.

Test results indicating that groups of students perform differently should be a cause for further inquiry and examination, with a focus upon the relevant educational programs and testing practices at issue. The existence of significant disparities does not mean, however, that the test illegally discriminates. Differences in test scores may result from a range of factors, including: lack of preparation; poor skills or knowledge; inadequate exposure to the material tested; poor motivation; or problems with the test itself.

The guarantee under federal law is for equal opportunity—not equal results. The legal non-discrimination inquiry regarding neutral practices (referred to by the courts as the "disparate impact" standard) illustrates this point: If the educational decisions based upon test scores reflect significant disparities in the kinds of educational benefits afforded to students based on race, national origin or gender, then ask more probing questions about what's going on to ensure non-discriminatory,

educationally sound practices. This common sense framework is paralleled in the Code of Fair Testing Practices in Education. The Code provides, in relevant part:

"Test users should...[r]eview the performance of test takers of different races, gender, and ethnic backgrounds when samples of sufficient size are available [and e]valuate the extent to which performance differences may have been caused by inappropriate characteristics of the test." [Joint Committee on Testing Practices, Code of Fair Testing Practices in Education (1988)]

The alignment of testing principles and legal standards could not, therefore, be clearer.

Myth Three: Test scores, alone, tell the whole story. FALSE, as a matter of good educational practice.

Tests provide very valuable guidance in making educational judgments affecting students. Decisions such as college admissions decisions frequently—and appropriately—include consideration of test scores. The value that test results can provide when making educational decisions about students does not mean, however, that test scores should as a matter of good educational practice trump the need for thoughtful educational decision making. (Note here that federal non-discrimination laws do not preclude the prospect of the permissible use of a standardized test as a sole criterion where that test has been validated for such use.)

Moreover, a test's value as an educational tool is dependent upon its design, the context in which the test is administered, and the ultimate uses of the test. For example, the SAT may be valid as a tool to be used in a university's admissions decisions. At the same time, that same test is clearly inappropriate as a basis for making decisions about whether to promote a student from eleventh to twelfth grade in high school or whether to confer a passing grade in chemistry for the year.

Even when a test is used for the purposes consistent with its design, a test is one tool among many. Just as tests are not perfect barometers of learning, conclusions based on those test results are not always error free. Many variables can affect a student's test performance, including: the quality of the student's education; the student's skill, ability, or knowledge about a particular topic; preparation for the test; or what the student ate for breakfast on the day the test was administered. Does this mean that we should do away with tests? Absolutely not. What it does suggest is precisely what test measurement standards affirm: the importance of considering multiple and educationally appropriate measures when making life-defining decisions about students. The 1985 American Psychological Association Standards for Educational and Psychological Testing state, for instance: "In elementary and secondary education, a decision ...that will have a major impact on a test taker should not automatically be made on the basis of a single test score" (APA Standard 8.12). About this point, the guidance from test developers in higher education is instructive. Consider, for instance:

- Test uses "that should be avoided" include "using test scores as the sole basis for important decisions affecting the lives of individuals, when other information of equal or greater relevance and the resources for using such information are available." [The College Board, Guidelines on the Uses of College Board Test Scores and Related Data (1988)].
- The SAT works "very well in many different circumstances...[but] there are differences in how it works for different groups of students, for different types of educational programs, and for different institutions." [The College Board, Research Notes, RN-01 (June 1997)].

### Conclusion

Ultimately, good educational practices—frequently reflected in test measurement standards—and federal case law highlight the importance of considering objective measures such as tests in appropriate ways when making decisions about students. In short, they affirm that not all tests are created equal and that tests should be used in ways that are valid for the particular purpose for which they are used.

This is the driving force behind the U.S. Department of Education Office for Civil Rights' continuing effort to provide assistance to policymakers and educators as we continue to enforce federal laws that prohibit discrimination against students. Rather than creating false and polarizing "win-lose" choices on this all-important set of issues, we need to, as Secretary Riley admonishes, "step back, lower our voices, truly listen to each other and search for common ground." That is our objective as we work to fulfill the promise of longstanding education goals and non-discrimination protections: high standards learning for all students.

## FOR INTERNAL COMPRENENTAL LIAMORING ONLY

## **TEST USE AND CIVIL RIGHTS**

## Why Is Test Use Important?

Tests continue to be used in many ways to measure to make placement, promotion and graduation decisions, for should understand the kinds of tests used and why and how competence in today's competitive world. From elementary through graduate school, test results often serve as a basis for decision-making that affects our youth. The progress of young schoolchildren increasingly is measured by test scores. Efforts to promote excellence in education are frequently associated with the use of high-stakes tests — tests whose results are used instance. To best understand tests, all of us -- parents, students, teachers, school administrators and policymakers they are used. The issue of nondiscrimination in testing and assessment is Education's initiatives. The U.S. Department of Education is high standards for academic achievement be coupled with the necessary instruction and support that help students reach those standards - as determined by valid and reliable the cornerstone of many of the U.S. Department of committed to the support of high standards and challenging assessments for all students. Nondiscrimination in testing and assessment is essential to ensuring that equal opportunities for system which both expects high performance and offers real and meaningful educational opportunities. It is critical that properly viewed as consistent with standards-based reforms -educational excellence are provided regardless of race, national origin, or sex. All students need an educational assessments.

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laws that prohibit discrimination against students on the basis of their race, national origin or sex. Any use of a high-stakes The improper use of high-stakes tests can violate civil rights test must be considered in the context of the educational interests at issue, constitutional guarantees and civil rights laws.

principles related to test use and civil rights, please see OCR's high-stakes tests. Specific examples of test use and civil rights requirements are discussed throughout this pamphlet and are This pamphlet describes civil rights requirements that apply to The constitutional requirements are outlined in one question and answer below. For a more complete discussion of the legal also included in the questions and answers section at its end. Nondiscrimination In High-Stakes Testing: A Resource Guide.

### What Tests Have Consequences For An Individual Student?

addition, there are some tests that are given on a large scale to to the school, student or parent. Instead, only group scores are government given at the end of the semester is an example. In measure the performance of an entire school or school district. In many such cases, individual student scores are not reported classroom. For younger students, a weekly spelling test would be an example. For older students, a final exam on American and designed to measure knowledge of topics covered in the Most students take tests that are prepared by their teachers reported for the school or for the school district.

test: those that are generally given on a state-wide or districtimportant. The focus of this pamphlet is on another type of Both classroom tests and broad school assessments are

DEMIT 4-99 FOR INTERNAL GOVERNMENTAL HANDLING ONLY wide basis and that are used to make educational decisions that have very important consequences for an individual student. Examples of these decisions are:

--whether or not students will be placed in gifted and talented programs;
--whether or not students will be promoted to the next grade or permitted to graduate; and
--whether or not students will be offered such benefits or opportunities as admissions or scholarships to specific colleges and universities, or to vocational education programs.

In cases like these, tests are used by schools to make major decisions about a student's educational future. Because these tests have important consequences for students, they commonly are called high-stakes tests.

Federal laws prohibit discrimination against students on the basis of race, national origin or sex in testing. This pamphlet outlines the relevant civil rights laws and the legal standards, along with frequently asked questions and answers regarding test use. (In addition, although beyond the general scope of this pamphlet, Federal law also prohibits discrimination on the basis of disability in testing and some of the basic requirements in this area are outlined in the question and answer section.)

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## Federal Civil Rights Legal Standards Regarding High-Stakes Test Use

## Different Treatment

on an intelligence test but does not assign white students with program for mentally retarded students based on their scores the same scores to that program, even though all other origin or sex can occur in the use of high-stakes tests. One orm of discrimination is called different treatment. This occurs when students are treated differently solely because of their ace, national origin, or sex in terms of how a test is given or justification (i.e., to remedy past illegal discrimination). One example of different treatment would be if a school district uses test scores to place girls in advanced placement math class only if they achieve higher test scores than boys placed in he same class. Another example would be a school district that puts minority group students in a special education how its results are used, absent an appropriate legal Discrimination against students on the basis of race, national placement factors are equivalent.

### Disparate Impact

A test may be discriminatory even if it is used in the same manner for all students and even if it is given under policies or practices that are the same for all students: it may result in a disproportionate denial of education benefits or opportunities to a particular group of students. Sometimes test scores result in students of a particular race, national origin or sex being denied — in numbers that are very different from their representation in the general student population — such education benefits or opportunities as promotion, graduation or placement. For example, a test would likely have a

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disparate impact if it results in placement of 10 percent of the school's total number of minority group students and two percent of the school's total number of white students in special education classes for mentally retarded students. (Whether or not any particular set of numbers results in the type of disparate impact that triggers concern depends on the outcome of a statistical analysis, a topic discussed in more depth in OCR's Nondiscrimination In High-Stakes Testing: A Resource Guide.)

It is important to underscore that such disparate impact, by itself, does not mean that discrimination has taken place. Instead, it is merely a red flag — an indication of possible discrimination — that suggests that additional questions regarding test use should be answered. Before deciding if disparate impact discrimination has taken place, a complete set of questions must be asked and answered in a process involving several steps, outlined below.

## Disproportionate Numbers of Students

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First, using our example, has the test resulted in markedly disproportionate numbers of students of a certain race, national origin or sex being placed in a special education class, as compared to the proportion of students of another race, national origin or sex? If the answer is yes, the next step is to determine the educational necessity of the test.

## Validity and Reliability

• Where the test has a disparate impact, the school district must show that the test is educationally necessary. In determining whether a test is

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standards to assess the validity and reliability of a scores. (Additional information about test validity and reliability is set out in the box accompanying designed to measure when used appropriately, if reliable, there should be evidence that the same the test use is valid and reliable. Professionals in decision in question. For a test to be considered the test is being used by the school in a manner consistent with its designed purpose, and if the students, taking the test multiple times with no lest in an educational decision-making context. educationally necessary, it must be shown that change in preparation, receive corresponding demonstrates that the test measures what it is the field of testing use professionally accepted lest results are relevant to the educational nferences from a test are valid if research his text.) If a test has a disparate impact and a school district cannot show that the test is both valid and reliable for its particular use, the test will not be found to be educationally necessary. Where a test with a disparate impact is not shown to be both valid and reliable for its particular use and the school district continues to use it in the same way, the district is in violation of Federal civil rights laws in education. If the test has a disparate impact and a school district can show that the test is both valid and reliable for its particular use, the next step is to determine whether there are any practical alternatives to the test in question that meet the school's educational needs.

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### More Information on Test Validity and Reliability

Professionals in the field of testing assess the use of a test to make educational decisions according to professionally accepted standards. The following set of inquiries introduces the complex process of determining the appropriateness of a test for use in a particular situation. In general, testing professionals ask the following types of questions.

Central inquirles - The central inquirles are:

--Does research demonstrate that the test measures what it is designed to measure for all students who are taking the test?
--Are the results reliable indicators of what the test is designed to measure?
--Is the test being used by the school in a manner that is consistent with its designed purpose?

-- Is this measure relevant to the educational

decision in question?

Where the answer to any of these basic inquiries is "no," the results are not appropriate for use in the particular situation. For example, let's use the example of a math achievement test designed for use state-wide in making decisions regarding whether a student is adequately prepared to move to the next grade level in math. A school might use this math achievement test in two ways - one way being a valid test use and one way being an invalid use of the test. First, it might use the test results in making decisions about whether to promote students to the next math grade. This use is consistent with the design of the

test. But what if the school uses the test to place students in a glited and talented program in language arts? This use is invalid because it is inconsistent with the design of the test; the information from the test is not relevant to placement in a language arts glited and talented program. In the first instance, test use is valid; in the second, it is invalid.

Where a test is being used as the sole criterion to make a high-stakes decision, the test must be designed for this use and there must be evidence indicating that it is appropriate to use the test as a sole criterion.¹ For example, a test designed to measure general intelligence would not be a good test to use as the sole measure in selecting students for a gifted and talented program. Because information provided by the test publisher indicates that the test was not designed for this purpose, this use of the test is not valid.

Achlevement exams - Tests can be used in making decisions about whether students have acquired a certain degree of knowledge and skills. For example, a school district might require that

The Standards for Educational and Psychological Testing, which are generally accepted professional standards that guide testing in schools, state that, [i]n elementary and secondary education, a decision ... that will have a major impact on a test taker should not automatically be made on the basis of a single test score. Other relevant information for the decision should also be taken into account by the professionals making the decision." See American Psychological Association Standards for Educational and Psychological Testing (1985) at 8.12.

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## Alternatives With Less Disparate Impact

Even where a test is valid and reliable, there still may be another test, or another way of measuring student achievement — or of measuring a characteristic such as level of proficiency in English or whatever characteristic the school wants to measure — that would serve the school's purpose as well as the test in question, and that would have a less negative impact on students of a particular race, national origin, or sex. If the use of such tests or measures is a practical alternative to the test in question and meets the school's educational needs, these alternatives must be used.

It is a good educational practice for school administrators to review the results of any testing program. If school administrators find that a test results in a disparate impact based on race, national origin or sex, the best educational practice is to inquire about other testing instruments or measures that would serve the school's purpose, be valid and reliable for that purpose, and that would provide all students with equal access to the school's programs and benefits.

knowiedge and skills in mathematics and language arts in order to receive a high school diploma. Schools students. Additionally, the state or school district that provided the opportunity to receive instruction that is opportunity to learn the material tested, schools have fully consistent with and aligned to curriculum goals that the assessment is aligned with curriculum goals or standards. States or school districts must also be time and opportunity to learn the material tested. If able to demonstrate that students have had enough is testing the students has the obligation to ensure have the obligation to ensure that all students are students pass a statewide test created to measure the instruction is not consistent with the goals or standards and if students have not had a fair or standards set by the state or district for all the responsibility to correct these problems.

Professionals in the field of testing use professionally accepted standards to assess the validity and reliability of a test in an educational decision-making context. It is important to note that a test is not necessarily valid or reliable merely because it is widely used by other school systems or because the company that developed it has a sound reputation.

For a more comprehensive discussion about technical considerations regarding tests, readers may consult OCR's Nondiscrimination in High-Stakes Testing: A Resource Guide, which includes a list of references on this topic

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## Ways To Improve Test Use

Even if use of a certain test is found to be discriminatory, frequently there are steps a school district can take without eliminating the use of the test. For example, a school district can enhance student learning opportunities to help students master the skills and knowledge measured by the test. Or the district can add to its decision-making process such other evaluation standards as grades, teacher evaluations, portfolios containing student work, or even a second and different test. Lastly, the school can revise the test to make it valid and reliable for the purpose for which it is to be used.

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# **QUESTIONS AND ANSWERS**

# What information about testing may be useful to parents and students?

A programs or individual progress, they may want to ask the school judges the test's importance, what factors may be best educational practice is for the district to take the about any tests with high-stakes consequences that will be lest will be given. Parents and students should know the school's overall decision - making process, including how used along with the test, how each of these other factors may be weighted, and what the consequences are for students who fail the test. Parents and students may want to find out what remedial work will be offered to the student who performs poorly on the test and determine what additional opportunities, such as optional after-school group of parents or an organization like the P.T.A. may want to meet with school counselors and administrators to earn about school tests. Many school districts find that the initiative in providing information about testing to parents When parents or students talk to school staff about given during the school year. Parents and students may find math achievement or general intelligence); and when each classes to improve test performance, will be offered. A it helpful to ask the name of each test; what knowledge, skill or ability each test is supposed to measure (for example, and students as early as possible.

When high-stakes decisions are made, including decisions based, at least in part, on tests, parents and students may need information that will enable them to understand how the decisions were made and to assess whether a student or group of students is being treated fairly, regardless of race, sex, or national origin. In terms of facilitating understanding on the part of parents and students, the best educational practice is for school administrators to be able to explain how the overall decision-making process worked.

# What are proficiency and achievement tests?

Proficiency tests evaluate the mastery of knowledge and skills. They can include such tests as those which evaluate students' reading and writing skills in English. They might also include tests which evaluate academic mastery in subject areas taught in school, such as mathematics or science. These tests are often called achievement tests.

In connection with the national trend toward increasing accountability and encouraging high standards, many states and school districts are using the results of achievement tests to help determine graduation or grade promotion. There are many reasons for this, including ensuring that high school graduates are prepared to either enter college or compete in the job market. States and districts may also want to motivate students to work toward greater academic achievement, or to ensure that high school diplomas meaningfully represent a particular level of achievement.

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# Are there any Federal requirements affecting public elementary and secondary school students with disabilities in connection with the use of high-stakes tests?

As two of the Federal civil rights laws listed on the secondary schools are required to provide a free appropriate public education to all students with disabilities in their jurisdiction. To comply with the requirements of these two Federal civil rights laws, a school must provide regular or special education and related aids and services necessary to meet the student's educational needs so that the student can participate in and benefit from the school's education program -- including participating in the public school's testing program.

When students with disabilities are tested, the civil rights requirements discussed in this pamphlet apply to them. In addition, schools must, among other requirements, select and administer the tests so that the results accurately reflect what the student knows or is able to do, rather than the student's disability. This means that students must be given appropriate accommodations and adaptations in the administration of the tests. Examples include oral testing, large print tests, Braille versions of tests, individual testing and separate group testing.

One high-stakes decision that affects some students with disabilities and that may involve tests, as well as other types of information, is the decision as to whether a student should be provided with special education. This decision

involves other decisions including: whether the student is an individual with a disability, covered by Section 504 and Title II; whether the student should be provided regular education with related aids and services or special education; and whether the student would be eligible under the Individuals with Disabilities Education Act (IDEA) (discussed below). Under both the civil rights laws and the IDEA, any determination of whether a student should be provided special education must be made on an individual basis in accordance with specific statutory and regulatory requirements, including requirements regarding the use of tests for that purpose.

services under the IDEA. However, an individual student's performance on such an assessment could be considered by parents and school districts as a part of an evaluation for the whether a student needs special education must be made on an individual basis through a process which involves the students in special education, as well as procedures regarding the participation of students with disabilities in general state and districtwide assessment programs discussed in the next question and answer). State and districtwide assessments of student achievement cannot be used alone for determining whether a student has an mpairment and needs special education and related The IDEA provides funds to states, and through them to local school districts, to assist in providing a free appropriate public education to students residing within the state in mandatory age ranges, and it establishes conditions for receipt of such funds. Under IDEA, the determination of use of tests or other evaluation materials and procedures. Under IDEA, states also must have nondiscriminatory procedures for purposes of evaluation and placement of

DRAFT 4-99 FOR INTERNAL GOVERNMENTAL HANDLING ONLY purposes of determining the student's need for special education under IDEA. For more information on how IDEA requirements affect high-stakes testing, please telephone the Department's Office of Special Education Programs at 202-205-5507.

Should public school students with disabilities be included in proficiency tests with high-stakes consequences that are given throughout a district or state?

A Under IDEA, this decision must be made on an animidial basis by the student's individualized education program (IEP) team, and must be reflected in the a violation of the civil rights laws prohibiting discrimination disabilities should be included in these assessments. As described immediately above, where necessary, appropriate the test must be provided to students with disabilities who student's IEP. For students who are not covered by the IDEA, but who are covered by Section 504, this decision must be made on an individual basis through other applicable evaluation and placement processes. It would be on the basis of disability, if a student with a disability who, based upon his or her IEP or Section 504 plan, should be test, is excluded from these opportunities on the basis of disability. It is generally expected that students with accommodations and adaptations in the administration of Under IDEA, this decision must be made on an preparing for and taking a state- or district-wide proficiency take these tests and should be specified in the student's IEP or Section 504 plan.

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The newly enacted Individuals with Disabilities Education Act Amendraents of 1997 (IDEA '97) requires States, as a modifications in the administration of State or districtwide not participate in a particular State or districtwide assessment of student achievement (or part of such an how the student will be assessed. IDEA '97 also requires state or local educational agencies to develop guidelines for disabled students who cannot take part in state and districtwide tests to participate in alternate assessments. These alternate assessments must be developed and conducted not later than July 1, 2000. For more information about the condition of receiving IDEA funds, to include students with assessments of student achievement that are needed in order for the student to participate in such assessment. assessment), the student's IEP must include statements of why that assessment is not appropriate for the student and DEA, please call the Department's Office of Special disabilities in State and districtwide assessment programs, with appropriate accommodations, where necessary. IDEA '97 also requires that the student's IEP specify any individual Similarly, if the IEP team determines that the student will Education Programs at 202-205-5507.

Students affected by discrimination laws in the How are limited English proficiency (LEP) use of high-stakes tests? LEP students ordinarily must be included in school or A district assessment programs. When LEP students are included in these assessment programs, the inferences and interpretations drawn from the students' responses to the Further, the students must be provided appropriate test or assessment procedure must be valid and reliable.

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administration, response or scoring conditions. Depending needs of a LEP student, providing a valid and reliable version of the test in the student's native language might be excluded from assessment programs, comparable information about their academic progress must be results. Accommodations might occur in the test format (including editing accommodations) and/or in the upon the nature and purpose of the test and the particular an appropriate accommodation. Other accommodations may include extended time or the use of bilingual dictionaries. Title VI requires the inclusion of LEP students in assessment programs, absent an educational or psychometric justification for their exclusion. If students are accommodations in order to ensure valid and reliable collected for these students.

In addition to the civil right laws discussed in proficiency tests for high-stakes decisions about which parents, students and school staff should be .this pamphlet, are there any other Federal rights or requirements related to the use of aware?

A .the Constitution of the United States. These apply to Yes, there are rights and requirements that arise from students and their public schools and they somewhat overlap with statutory civil rights requirements. An overview of these rights follows. However, it is important to point out that OCR does not enforce constitutional rights, unless there are claims of discrimination which are covered by the

DIVALT 4-99 FOR INTERNAL GOVERNMENTAL HANDLING ONLY federal civil rights statutes. For this reason, private legal counsel should be consulted for more information or to seek enforcement of these rights in Federal Court.

The Constitution requires that fundamental fairness be present in situations in which a government institution — such as a public school — creates an understanding on the part of students that they are entitled to something important: for example, a high school diploma. What if a student enters high school and the rules provide only that successful completion of coursework is necessary to receive a diploma? And then, when the student enters the senior year, the rules change to require that students also pass a proficiency test to earn a diploma? In this case, there are key issues related to whether a high-stakes test complies with constitutional standards for due process. Among the key issues addressed by Federal courts in making this determination are:

- -- whether there is a reasonable educational justification for the test;
- -- whether the test measures what it is designed to measure;
- -- whether the test represents a fundamental change in the rules of the school related to an important expectation, such as high school graduation, and, if so, whether the students had an adequate opportunity to prepare for, take, and pass the test.

When should a parent or student file a complaint with OCR regarding test use?

DRAFT 4.90 FOR INTERNAL GOVERNMENTAL HANDLING ONLY School districts may take voluntary action to correct discrimination when it is brought to the attention of school decision-makers. However, parents or students may file a complaint with OCR immediately if they believe that discrimination has occurred.

What are some of the steps OCR takes when investigating a discrimination complaint about the disparate impact of a test used to make a high-stakes decision?

OCR then determines if there are practical alternatives to the test. Specifically, are there other tests or assessment procedures that would have a less negative effect on the basis of race, national origin or sex; or is there another reasonable way to achieve the school's objectives that while accomplishing the same educational objective as the lest in question? Where appropriate, OCR also would be interested in the ways in which the school or school district would enhance learning opportunities so that students are A.the test in question has resulted in a markedly particular program. Next, OCR determines if the school has determining educational necessity, OCR examines evidence of the test's validity and reliability, as described above. would have a less negative impact on groups of students, national origin or sex being placed in or denied access to a disproportionate number of students of a certain race, OCR seeks information regarding whether the use of shown that the test is educationally necessary. prepared for the high-stakes test in question.

# How does a student or parent file a complaint ...with OCR?

If a student or a parent, or another person, decides to file a complaint with OCR, the complaint should be filed with the OCR enforcement office responsible for the state in which the school is located. The offices are listed on the last page of this pamphlet. Generally, the complaint should be filed within 180 days of the last act of alleged discrimination.

The complainant should give OCR his or her name, address, and daylime phone number, and provide the date(s) and enough information about the alleged discriminatory act(s) so that OCR can understand the nature of the complaint.

OCR may extend the time for filing a complaint in certain circumstances. For example, when a student has filed a grievance under school procedures within 180 days of the last act of alleged discrimination, OCR will generally accept a complaint raising the same allegations up to 60 days after the end of the school procedures because it encourages students to file grievances with their own school first. How OCR resolves the complaint usually then would be limited to the allegations raised in the grievance.

END]

# Nondiscrimination in High-Stakes Testing: A Resource Guide



I disagree with the proposition that there are inherent racially based differences in the capacity of the American people to reach their full potential.

President Bill Clinton, October 21, 1994

An invalid test cannot measure merit.

Walls v. Mississippi State Dept. of Public Welfare, 542 F. Supp. 281, 311 (N.D. Miss. 1982), affd in relevant part, 730 F. 2d 306 (5th Cir. 1984).

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#### NONDISCRIMINATION IN HIGH-STAKES TESTING: AN OVERVIEW

#### I. Introduction

The issue of nondiscrimination in high-stakes testing is, at its core, a critical issue concerning access to education. When tests are used to make educational decisions, they should be used to measure students' abilities, knowledge, or qualifications, regardless of race, national origin, or sex. The U.S. Department of Education's Office for Civil Rights (OCR) has developed this resource guide in order to provide our staff and members of the educational community that we serve with practical guidance on testing and assessment principles that lie at the core of Title VI of the Civil Rights Act of 1964 (Title VI) and Title IX of the Education Amendments of 1972 (Title IX) case law.

This Resource Guide provides an overview of the federal standards and related educational principles that should guide the use of tests for making high-stakes educational decisions, such as those that involve: student placement in gifted and talented programs or programs serving students with limited English proficiency; referral of students for special education services; student promotion from one grade to another grade level; diploma awards; and higher education admissions decisions and scholarship awards. This Guide applies to norm-referenced and criterion-referenced tests¹ as well as to professionally designed alternative forms of assessment, which are used for making high-stakes educational decisions. The Resource Guide is not intended to apply to tests that are used to measure the performance of schools but have no high-stakes consequences for individual students nor does the Resource Guide address teacher-created classroom tests, even when such tests are being used for high-stakes educational decisions.

The issue of nondiscrimination in testing and assessment is properly viewed as consistent with standards-based reforms. Education leaders and the general public agree that there must be challenging standards for all students. In recent years, States and communities across the nation have embarked on far-reaching systemic efforts to reform their schools. Uniting their efforts has been an emphasis on high academic standards and high-quality assessments geared to those standards.

By defining what students should know and be able to do, standards keep schools focused on the desired results for students and can stimulate the development of appropriate curricula and the application of effective teaching strategies to make these results possible. Standards also indicate what assessments must measure in order to show achievement.

<sup>&</sup>lt;sup>1</sup> Norm-referenced tests are tests used to identify an individual's performance in relation to the performance of other people in a specified group on the same test. American Psychological Association Standards for Educational and Psychological Testing (1985) (APA Standards) at p. 92. Criterion-referenced tests allow users to make score interpretations in relation to a functional performance level. APA Standards at p. 90. In other words, criterion-referenced tests are designed to measure to what degree a learner has mastered a certain skill.

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High-quality assessments can make high standards meaningful by providing communities with a mechanism by which to hold schools accountable for achievement. It is critical that high standards for academ achievement be coupled with the necessary instruction and support that help students reach those standards - as determined by valid and reliable assessments.

The U.S. Department of Education is committed to the support of high standards and challenging assessments for all students. By outlining the relevant requirements of federal civil rights law, this Guide should assist states and local educational agencies instituting high-stakes assessments for all students. The Guide is intended to help states and local educational agencies avoid potential pitfalls in their implementation of high standards when using large scale assessments with educational consequences for individual students.

Federal civil rights laws ensure that all students have equal educational opportunities. Although many of the federal legal standards that should guide sound educational decisions are importable from the federal cases addressing employment discrimination, there are, nonetheless, critical differences. The educational institution's obligation to a student does not ordinarily end once a decision is reached to, for example, place the student in a particular educational program. The educational institution is responsible for ensuring that the student has appropriate educational opportunities throughout his or her educational career to improve and develop needed academic skills. Indeed, observing the differences between the employment and education settings, a federal court recognized:

If tests predict that a person is going to be a poor employee, the employer can legitimately deny the person the job, but if tests suggest that a young child is probably going to be a poor student, a school cannot on that basis alone deny that child the opportunity to improve and develop the academic skills necessary to success in our society.

Larry P. v. Riles, 793 F.2d 969, 980 (9th Cir. 1984).2

Similarly, the question of test use cannot be examined in a vacuum. While the Resource Guide focuses specifically on the discriminatory use of tests which are used for high-stakes educational decisions, this issue must be considered in the context of the educational objectives involved and the effect of the particular testing practice in question upon students, particularly where classification of students and the provision of services is at issue. (Tab B of this Resource Guide lists policy and technical assistance documents that provide resource information and legal guidance relating to the nondiscriminatory classification of students and the provision of services to students.)

<sup>&</sup>lt;sup>2</sup> <u>See also National Research Council. High Stakes Testing for Tracking. Promotion.</u> and Graduation, at pp. 61 - 62, 76 - 77, 97 (National Academy Press, Washington, D.C. 1999).

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#### II. Scope of the Resource Guide

The Resource Guide does not apply to modifications of tests and/or testing conditions required for the purpose of accommodating individuals with disabilities under Section 504 of the Rehabilitation Act, the Individuals with Disabilities Education Act (IDEA) or the Americans with Disabilities Act (ADA).<sup>3</sup> Although the legal theories of discrimination discussed in the Resource Guide are generally applicable to disability issues that arise under Section 504, the IDEA and the ADA, an additional analysis regarding testing accommodations provided to individuals with disabilities is also required. See, e.g., Attachment A: Dear Colleague Letter (September 29, 1997) (addressing the inclusion of students with disabilities in statewide assessment systems). This analysis is beyond the scope of the Resource Guide.

The Resource Guide, along with the attached Compendium of Legal and Technical Resources (Appendix), should be read as an explanation of the legal and conceptual framework needed for understanding the issues raised by challenges to high-stakes testing. The model (and pragmatic) questions set out in Tab A should be viewed as a starting point for addressing questions of great complexity regarding challenges to testing and assessment practices. These model questions do not define the "floor" of what must be asked any more than they define the "ceiling" of what may be asked. Those decisions are inherently case-specific. Tab C provides a glossary of terms relating to test validity.

#### III. Foundations of the Resource Guide

#### A. Professional Standards

Generally-accepted professional standards for evaluating standardized tests provide a significant foundation for this guide. They include those described in the Standards for Educational and Psychological Tests prepared by a joint committee of the American Psychological Association, the American Educational Research Association, and the National Council on Measurement in Education; the Code of Fair Testing Practices in Education prepared by the Joint Committee on Testing Practices; and the Uniform Guidelines on Employee Selection Procedures. At OCR's request, the National Academy of Sciences' Board on Testing and Assessment (BOTA) reviewed earlier drafts of this guide and provided comments, which have helped to ensure that the Resource Guide is consistent with existing professional standards.

<sup>&</sup>lt;sup>3</sup> Section 504 of the Rehabilitation Act and Title II of the Americans with Disabilities Act are enforced by OCR: the Individuals with Disabilities Education Act is administered by the U.S. Department of Education's Office of Special Education Programs.

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#### B. Legal Standards

This guide outlines two separate legal theories of discrimination: disparate treatment and disparate impact. Each theory is based on settled federal legal principles under Title VI of the Civil Rights Act of 1964 and Title IX of the Education Amendments of 1972 and neither breaks any new legal ground.

A disparate treatment analysis is used to determine whether a policy or practice regarding testing is being applied differently to an individual student or group of students because of their race, national origin, or gender, without legal justification for doing so, e.g., as a remedy for past <u>de jure</u> discrimination. This analysis would be used to determine, for example, whether black students and white students are being tested under different conditions or whether students with the same test scores are being treated differently by an educational institution.

Under a disparate impact analysis, the focus is on the "effects" of the application of a facially neutral policy or practice, regardless of whether the adverse consequences for a particular race, national origin, or gender were intended. The use of a disparate impact analysis is appropriate when the use of a test pursuant to a race-neutral policy or practice creates a significant difference in the granting or denial of benefits or opportunities on the basis of race, national origin or sex. Tests that have a disparate impact on the basis of race, national origin, or sex must be educationally necessary; otherwise, they are not permissible under Title VI or Title IX. Educational necessity involves a showing that the test is valid and reliable for the purpose for which it is being used<sup>4</sup>. The use of the test is still not permissible under Title VI or Title IX if the test is not the least discriminatory practical alternative that can serve the education institution's educational purpose. See Attachment B: Memorandum from the Attorney General for Heads of Departments and Agencies that Provide Federal Financial Assistance, "Use of the Disparate Impact Standard in Administrative Regulations under Title VI of the Civil Rights Act," July 14, 1994.

<sup>&</sup>lt;sup>4</sup> Section III. B. of the Resource Guide contains a discussion of test validity and reliability. Tab C provides a glossary of terms relating to test validity.

#### RESOURCE GUIDE

#### I. Introduction

When tests are used to make educational decisions, they should be used to measure students' abilities, knowledge, or qualifications, regardless of race, national origin, or sex. Civil rights concerns arise when test uses do not satisfy federal antidiscrimination standards. This Resource Guide outlines the requirements of federal law prohibiting misuse of tests and other assessment procedures that result in discrimination based on race, national origin, or sex. It is designed to provide a general analytical framework under Title VI and Title IX for determining the proper use of tests and other assessment procedures in the educational context.

In evaluating a test or other assessment procedure, it is important to consider how the test is being used. In some cases, it may be used to make a certification or selection decision (e.g., admission to a school, awarding of a scholarship, or teacher certification). In other cases, it may be used to classify students (e.g., to identify students as needing special education or special language services or to identify students as gifted and talented).

When high-stakes educational decisions are made, tests may be used in conjunction with other criteria, such as teachers' recommendations. Ordinarily, if there are allegations or evidence regarding possible discrimination on the basis of race, national origin, or sex with respect to the use of a test or other criteria as part of a high-stakes decision making process, there should be an inquiry into the operation of the entire assessment process. There should be an inquiry into what criteria are being utilized as part of the entire process and the weight being given to each of the criteria in the process. This Resource Guide focuses on cases where the test or assessment contributes significantly to the high-stakes decision. However, if other criteria are contributing to a disparate impact on the basis of race, national origin, or sex, they should be evaluated to ensure that they are educationally appropriate and necessary, as well.

#### II. Basic Federal Standards

The requirements of Title VI and Title IX apply to all educational institutions that receive federal funds. These laws apply to all of the academic, athletic, and extracurricular programs of the institution, whether conducted in facilities of the recipient or elsewhere. Title VI prohibits race and national origin discrimination in programs and activities that receive Federal financial assistance. Title IX prohibits sex discrimination in education programs that receive Federal financial assistance. Title VI and Title IX cover the uses of property that the recipient owns and the activities that the recipient sponsors. Title VI and Title IX cover these operations, whether the individuals involved in a given activity are students, faculty, employees, applicants, or other participants. See Compendium at pp. 1 - 3.

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Some federal courts have addressed challenges to the use of tests for high-stakes purposes under the equal protection and due process clauses of the Fourteenth Amendment to the U.S. Constitution. Although OCR enforces statutory rights under Title VI and Title IX rather than constitutional rights, to the extent the claim is that a school district's use of tests is discriminatory, those actions may violate both the statutes and the Constitution. OCR normally would not be involved, however, in cases in which there were no allegations of discrimination. Thus, those cases challenging the use of tests for constitutional reasons unrelated to discrimination would not fall within OCR's jurisdiction. Some federal cases in which discrimination claims have been raised have also involved equal protection challenges to a jurisdiction's use of tests in which the claim is based not on discriminatory intent but on the jurisdiction's use of tests to separate out those students who should not be allowed to graduate.<sup>5</sup> Under these circumstances, since there is no claim of discrimination based on membership in a suspect class, the equal protection claim is reviewed under the rational basis standard. The jurisdiction thus need show only that the use of the tests has a rational relation to a valid state interest. See Debra P. v. Turlington, 644 F.2d 397, 406 (5th Cir. 1981); Erik V. v. Causby, 977 F. Supp. 384, 389 (E.D.N.C. 1997).6

Due process challenges to the use of tests fall into two categories, substantive and procedural due process. Analyses under the due process clause address whether students have been denied, based on test scores, educational benefits or opportunities to which they had a legitimate claim of entitlement. Such cases typically involve a procedural due process claim that student were not given sufficient notice of the test and its requirements, or a substantive due process claim that the students were not taught the material on which the tests were based. <u>Debra P.</u>, 664 F.2d at 404-405; <u>Crump v. Gilmer Independent School District</u>, 797 F. Supp. 552, 555-556 (E.D.Tex. 1992).

#### III. Disparate Impact Analysis

A disparate impact analysis may be applied to allegations involving discriminatory test use by educational institutions. Under this analysis, the use of any educational test which has a significant disparate impact on members of any particular race, national origin, or sex is discriminatory, and a violation of Title VI and/or Title IX, respectively, unless it is

<sup>&</sup>lt;sup>5</sup> As a general matter, courts express reluctance to second guess a state's educational policy choices when faced with such challenges, although recognizing that a state cannot "exercise that [plenary] power without reasons and without regard to the United States' Constitution." <u>Debra P. v. Turlington</u>, 644 F.2d 397, 403 (5th Cir. 1981).

<sup>&</sup>lt;sup>6</sup> Where, however, the use of a facially race-neutral test perpetuated the effects of the prior dual school system in which students were intentionally segregated on the basis of race, such a test could violate the equal protection clause even absent direct evidence of discriminatory intent. <u>Debra P.</u>, 644 F.2d at 407, citing <u>Arlington Heights</u> v. <u>Metropolitan Housing Development Corp.</u>, 429 U.S. 252, 266-268 (1977); see also <u>Anderson</u> v. <u>Banks</u>. 520 F. Supp. 472, 500 (S.D.Ga. 1981) (discriminatory impact of the test cannot be considered separately from the de jure discrimination that preceded it).

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educationally necessary and there is no practicable alternative form of assessment which meets the educational institution's educational needs and would have less of a disparate impact on the basis of race, national origin, or sex.

In applying a disparate impact analysis, the following questions should be addressed:

- A. Does the educational institution's use of an educational test result in the significantly disproportionate denial of an educational benefit or opportunity to members of a particular race, national origin, or sex?
- B. If so, is the use of the test educationally necessary?
- C. If so, do there exist practicable alternative forms of assessment which would substantially serve the school's stated purpose and are valid and reliable for that purpose, but which have less of a disparate impact on the basis of race, national origin, or sex?

Each question is discussed in more detail below. Where, based on evidence, there is a finding that the use of a test or assessment procedure caused or contributed to a disparate impact on members of a particular race, national origin, or sex (the first question), and the test or procedure does not meet the legal standard of educational necessity (the second question) or there is a practicable alternative form of assessment which would meet the educational institution's educational needs and would have less of a disparate impact on the basis of race, national origin, or sex (the third question), there is a violation of Title VI or Title IX under this disparate impact analysis.

#### A. Establishing Disparate Impact

Under a disparate impact analysis, a school's use of an educational test that causes or contributes to a disproportionate denial of an educational benefit or opportunity to members of a particular race, national origin, or sex is sufficient information to indicate a possible failure of compliance with Title VI or Title IX which should be investigated further. It is important to note that disparate impact by itself does not necessarily mean that discrimination has taken place. Disparate impact may lead to a finding of discrimination only when the use of the test in question is not educationally necessary or when there is no practicable alternative form of assessment which would meet the educational institution's educational needs and have less of a disparate impact on the basis of race, national origin, or sex.

#### B. Establishing Educational Necessity

Once it has been determined that a disparate impact exists, it must then be determined whether the use of the test or assessment procedure is educationally necessary.<sup>7</sup> To meet

<sup>&</sup>lt;sup>7</sup> Where a test is being used as the sole or principal criterion for making educational decisions and where it was clearly not designed to be used as such, there is no basis upon which to conclude that the test is educationally necessary.

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the educational necessity standard, the test or assessment procedure must be valid and reliable for the purpose for which it is being used.

In evaluating the validity and reliability of a test or assessment procedure, generally accepted professional standards should be the foundation for such decision making. These standards include the Standards for Educational and Psychological Testing prepared by a joint committee of the American Psychological Association, the American Educational Research Association, and the National Council on Measurement in Education; the Code of Fair Testing Practices in Education prepared by the Joint Committee on Testing Practices; and the Uniform Guidelines on Employee Selection Procedures<sup>8</sup>. All decisions as to whether a test or procedure has met professionally accepted standards should be made in consultation with experts.

As discussed below, in determining whether a test or assessment procedure is educationally necessary, it must be shown that the test or procedure is valid and reliable for the purpose for which it is being used.

#### 1. Technical Considerations

#### Validity

Establishing validity is the process of evaluating the degree to which a test measures what it claims to measure and leads to legitimate inferences that are appropriate or meaningful. The demonstration of validity is multifaceted and depends on the type of assessment and the purposes for which the test was designed to be used.

Often, validity demonstrations will require careful analysis of data according to existing professional standards. This is a complex and specialized endeavor, and professionally accepted validation standards and techniques are evolving (for example, the 1985 Standards for Educational and Psychological Testing are currently being revised). Tab C contains a glossary of terms related to test validity.

<sup>&</sup>lt;sup>8</sup> Although there are many principles in the Uniform Guidelines that apply to educational testing in general terms, the Uniform Guidelines do not address educational testing issues. There are critical, contextual differences between employment and educational testing that should not be overlooked when using the Uniform Guidelines as a resource in the educational setting. The Uniform Guidelines were adopted by and are currently used by the U.S. Equal Employment Opportunity Commission, the U.S. Department of Labor, and the U.S. Department of Justice.

<sup>&</sup>lt;sup>9</sup> Indeed, it may not be technically correct to refer to a test or assessment procedure as being valid. Rather, it is the inferences and interpretation drawn from the responses to the test or procedure that must be valid. However, for simplicity§s sake, this guidance will often use the more common approach of referring to the test or procedure as being valid for the purpose for which it is being use.

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In some cases, a test will clearly not be valid for the purpose for which it is being used. For instance, where a test manufacturer states that a test is not valid for use as a sole criterion in educational decision making, it is a clear misuse of that test if the school, in fact, uses only the test results in making a high-stakes educational decision.

Construct validity is relevant when an assessment is used to measure a particular characteristic, property, skill, ability, capacity, academic achievement, or behavior. The construct validation of a test usually involves a series of studies, using a variety of research methodologies.

The validation of constructs of academic content are relevant when a recipient is using a test to measure the acquisition of specific knowledge or academic skills. For example, a statewide proficiency test designed to measure whether students have learned specific skills or gained specific knowledge in order to determine whether they should receive a diploma would be subject to an assessment of the validity of the constructs of its content.

Criterion-related validity is relevant when scores on a test or assessment procedure are related to the examinee's performance on some other measure, which is known as a criterion. For example, when a recipient is using test scores to accept or reject applicants to a particular program, school, or curriculum, it should have evidence that the test scores correlate significantly with success in the program, school, or curriculum.

#### Reliability

Along with evidence of a test's validity, evidence of a test's reliability over time and over students should be considered and must conform to accepted professional standards.<sup>10</sup> Reliability is the degree to which test scores are consistent, dependable, or repeatable. For a test to be considered reliable, there should be evidence that the same students, taking the test multiple times with no change in preparation, receive corresponding scores. No test is perfectly reliable and differing amounts of error or unreliability are tolerated, depending upon the purposes for which the test or procedure is designed to be used. Reliability may be affected by the type of assessment procedure at issue, <u>e.g.</u>, a standardized test versus a performance-based assessment.<sup>11</sup>

<sup>&</sup>lt;sup>10</sup> The 1985 Standards for Educational and Psychological Testing discuss reliability. See APA Standards at pp. 19 - 23.

Performance-based assessment requires students to generate rather than choose a response. Students are required to actively accomplish complex and significant tasks, while bringing to bear prior knowledge, recent learning, and relevant skills to solve problems. Demonstrations, written or oral responses, journals and portfolios are examples of performance-based assessment. Herman, J.L., Aschbacher, P.R., & Winters, L. (1992). A Practical Guide to Alternative Assessment. Alexandria, VA: Association for Supervision and Curriculum Development.

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#### Fairness

Within the constraints of the defined purposes of a test or procedure, it is expected that the assessment will be valid and reliable for all students taking the assessment.<sup>12</sup> That is, there must be adequate evidence that the test is measuring the same academic constructs for all students, and that the results are sufficiently precise for all students.

#### Use

Assessment results can be used appropriately or inappropriately. Misuse can stem from two test-related considerations, as well as other problems in the decision-making process. That is, users may suggest a test or procedure is measuring what it is not, thereby producing invalid inferences. They may attempt to use results in making decisions which require a higher level of precision or reliability than the assessment is designed to produce. An example of this type of misuse is a school district using results from a test as a sole criterion in making a high-stakes decision when the test publisher has stated that the test is not to be used as a sole criterion.<sup>13</sup> The processes which users engage in to make decisions about individuals or groups may themselves be flawed, so that the results of tests with reasonably valid and reliable inferences are used inappropriately.

Invalid inferences can stem from misalignment between what is described as being assessed and what is actually being measured. It might also stem from a misalignment between curriculum goals or standards and what the high-stakes test or procedure is measuring, or between what is being assessed and what is being taught in classrooms. In each situation, the source of the misalignment must be established so that it can be determined where changes are needed. For instance, in determining whether a high-stakes test is being used appropriately, it may be appropriate to determine the degree to which schools provide instruction in the knowledge and

<sup>12</sup> The 1985 Standards for Educational and Psychological Testing address technical issues of fairness in testing. See e.g., APA Standards at standard 1.2, 1.5, 1.8, 1.10, 1.13, 3.5, and 3.10. See also Paul W. Holland & Howard Wainer, Differential Item Functioning (Lawrence Erlbaum Associates, Publishers 1993); National Research Council. High Stakes Testing for Tracking, Promotion, and Graduation, at pp. 78-82.

<sup>13</sup> See also APA Standards at standard 8.12 ("[i]n elementary and secondary education, a decision ... that will have a major impact on a test taker should not automatically be made on the basis of a single test score. Other relevant information for the decision should also be taken into account by the professionals making the decision."); National Research Council. High Stakes Testing for Tracking, Promotion, and Graduation, at p. 3.

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skills measured by the test. A statewide proficiency test could be subject to an analysis of the degree to which the schools in the State provide adequate instruction in the content areas measured by the test. Often, it is necessary to determine whether curriculum goals or standards have been clearly identified. If they have been clearly identified, then the alignment of instruction and assessment should flow from these standards. Misalignment would occur if either the instruction or assessment is not consistent with the standards.

#### 2. Establishing Technical Merit

Tab A includes guidance on the types of questions to ask and information to obtain regarding the technical merit of assessments. These sample questions should be considered as starting points for appropriate inquiry. In most cases, these questions should be refined, modified, and supplemented based on the facts of the case and the advice of testing and/or other education experts.

The following guidelines should be considered when evaluating evidence of technical merit:

- a. No assumption of technical merit. The general reputation of a test, its author, or its publisher, or casual reports of its validity are not evidence of a test's technical merit. A test is not considered technically viable under federal law based on a test's name or descriptive labels; promotional literature about the test; data regarding the frequency of a test's use; or testimonial statements and credentials of test publishers, consultants, or schools which have previously used the test. A publisher's test manual may provide technical evidence; this alone is not sufficient to determine technical merit.
- b. Acceptable types of evidence. The use of a test should be supported by studies of the same test conducted by test publishers or professional researchers which demonstrate adequate validity and reliability for the particular use. Such studies must show that the use of the test by the school is the professionally accepted equivalent to the use for which the test was validated. The use of the test by the school should be within the technical parameters defined by the publisher and demonstrated by the evidence.

<sup>14</sup> Several federal court decisions have addressed the degree to which schools have provided adequate instruction in the knowledge and skills measured by a test. See Debra P. v. Turlington, 644 F. 2d 397, 405 (5th Cir. 1981); Crump v. Gilmer Independent School District. 797 F. Supp. 552, 555-6 (E.D. Tex. 1992). The inquiry regarding whether there is an alignment between knowledge and skills that are being tested and the curriculum and instruction that are being provided to students is critical when the test use in question involves an assessment of learning or achievement in school.

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As one part of the process of showing that a test or procedure is technically sound, it may be appropriate to assess the degree of relationship between test scores and performance criteria. This may be done by researchers using professionally accepted research and statistical procedures.

#### 3. Cutoff Scores

In determining whether a test or procedure with a disparate impact is educationally necessary, it is necessary to look to how the test or procedure is actually used by the recipient. In some cases, a test or assessment procedure may be used without a specific passing or cutoff score. In other cases, a score may be set, either by the test developer or the test user. Standard 6.9 of the 1985 Standards for Educational and Psychological Tests states that "[w]hen a specific cut score is used to select, classify or certify test takers, the method and rationale for setting that cut score, including any technical analyses, should be presented in a manual or report." This information must be considered in determining whether the cutoff score used by a recipient was set by some systematic process that reflects the good faith exercise of professional judgment.

#### C. Alternatives With Less Disparate Impact

Even if a school can show that a test or assessment procedure is valid and reliable, the school's continued use of the test or procedure may be in violation of federal law if one or more instruments, criteria, or procedures are available as a practicable alternative to the challenged test or procedure, and if any such alternative 1) substantially serves the educational purposes for which the test or procedure is used, 2) is valid and reliable for those purposes, and 3) would have a lesser disparate impact.

It is a good educational practice for school administrators to review the results of any testing program. If school administrators find that a test results in a disparate impact based on race, national origin or sex, the best educational practice is to inquire about other testing instruments or measures that would serve the school's educational purpose, be valid and reliable for that purpose, and have a less negative impact on students of a particular race, national origin, or sex.

#### IV. Different Treatment Analysis

If warranted by the nature and scope of the allegations or evidence, a different treatment analysis may be utilized, as described below, to determine whether the educational institution administered a test or assessment procedure differently or used scores differently because of the students' race, national origin, or sex, without a legitimate, nondiscriminatory reason. If the reason for the different treatment was, <u>e.g.</u>: 1) the provision of testing accommodations or auxiliary aids to qualified individuals with disabilities as required by Section 504 of the Rehabilitation Act of 1973 or Title II of the Americans with Disabilities Act of 1991; or 2)

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voluntary or remedial affirmative action undertaken in accordance with federal law, the educational institution may have a legal justification for the different treatment and there may be no violation of federal law.

Otherwise, tests and assessment procedures must be administered and scores used in the same manner regardless of race, national origin, or sex. Even if a test or procedure is supported by sufficient evidence of educational necessity, an educational institution may still be in violation of Title VI and/or Title IX if the test or procedure is administered differently or the scores are used differently for students because of their race, national origin, or sex.

#### V. Equal Opportunity for Limited-English Proficient Students

The requirements of Title VI discussed above regarding the use of tests for making high-stakes educational decisions are applicable when tests are being used to make high-stakes educational decisions concerning students with limited English proficiency. Under Title VI and other federal laws, State educational agencies and school districts are required to ensure that students are not denied equal educational opportunities because a student has limited proficiency in English.

Limited English proficient (LEP) students must ordinarily be included in assessment programs. When LEP students are included in assessment programs, the inferences and interpretations drawn from the students' responses to the test or assessment procedure must be valid and reliable. Further, the students must be provided appropriate accommodations in order to ensure valid and reliable results. Accommodations might occur in the test format (including editing accommodations) and/or in the administration, response or scoring conditions. Depending upon the nature and purpose of the test and the particular needs of a LEP student, if students are literate in their native language, and if the instruction has been in that language, providing a valid and reliable version of the test in the student's native language might be an appropriate accommodation. Other accommodations may include extended time or the use of bilingual dictionaries. If students are excluded from assessment programs, based on legitimate educational or psychometric justifications for their exclusion, comparable information about their academic progress must be collected for these students.

#### VI. Analysis Where Prior Dual System

School districts that have operated dual systems and have not been declared unitary have an obligation to dismantle their prior <u>de jure</u> segregated systems. The use of any educational test or assessment procedure may be a violation of Title VI if it had been used to achieve the segregation or if it perpetuates the segregation. Where such tests or assessment procedures are being used, school districts have an obligation to identify, consider and implement less discriminatory criteria consistent with sound educational policy, to the extent practicable.

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#### VII. Remedies

Where an educational institution is in violation of Title VĮ or Title IX, there are a range of remedies that may be used to come into compliance with federal law. Remedies should be designed to ensure that educational institutions comply with civil rights statutes when meeting their educational goals. Depending on the facts of a given case, there are many permissible responses to correcting a violation. If the administration or design of a test is discriminatory on the basis of race, national origin, or sex, appropriate remedies might include: supplementing the use of the test with other assessment measures; revising the test instrument within a reasonable period of time to address compliance concerns; or substituting the test with another available instrument that more appropriately measures what is intended to be measured. If the test or assessment procedure reflects discriminatory educational practices with respect to the adequacy of instruction provided to students to prepare them to take the test, an appropriate remedy might include enhancing learning opportunities for students to perform well on the test.

#### APPENDIX: COMPENDIUM OF LEGAL AND TECHNICAL RESOURCES

This compendium provides an outline of key legal and technical resources to serve as a reference for inquiries regarding potential discrimination in the use of an educational test or assessment procedures.

The investigation and analysis of disparate impact cases under Title VI of the Civil Rights Act of 1964 (Title VI), 42 U.S.C. § 2000d, and Title IX of the Education Amendments of 1972 (Title IX), 20 U.S.C. § 1681, rely, to a large extent, on case law developed under Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000e, which prohibits discrimination on the basis of race, color, national origin, sex, and religion in employment. See United States v. LULAC, 793 F.2d 636, 648-49 (5th Cir. 1986); Georgia State Conference of Branches of NAACP v. Georgia, 775 F.2d 1403, 1417 (11th Cir. 1985); NAACP v. Medical Center, Inc., 657 F.2d 1322 (3rd Cir. 1981); Dillon County District No. 1 and South Carolina State Department of Education, No. 84-VI-16 (Civil Rights Reviewing Authority 1987).

#### I. Basic Federal Standards

# A. Title VI and Title IX Prohibit Discrimination in Federally Funded Programs and Activities

Title VI prohibits race and national origin discrimination in programs and activities that receive Federal financial assistance. Title IX prohibits sex discrimination in education programs that receive Federal financial assistance. See also 34 C.F.R. Part 100 (regulations implementing provisions of Title VI) and 34 C.F.R. Part 106 (regulations implementing provisions of Title IX). Under the Civil Rights Restoration Act of 1987, OCR generally has institution-wide jurisdiction over a recipient of Federal funds. See 42 U.S.C. § 2000d-4 (1989).

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#### B. Specific Discriminatory Actions Prohibited By Title VI and Title IX15

The regulations implementing Title VI do not specifically address the use of tests and assessment procedures, but do include a general provision prohibiting discrimination based on race or national origin. 34 C.F.R. § 100.3(b)(5).

The regulations implementing Title IX specifically prohibit the discriminatory use of tests or assessment procedures in admissions, 34 C.F.R. § 106.21, employment, 34 C.F.R. § 106.52, and counseling, 34 C.F.R. § 106.36. Title IX further prohibits discrimination in areas in which test or assessment procedure results are often used to allocate benefits and opportunities. See 34 C.F.R. § 106.37(a) (prohibition against discrimination in financial aid awards and against assisting any entity which provides financial aid to students in a manner which discriminates based on sex); 34 C.F.R. § 106.31(b)(6) (prohibition against providing "significant assistance" to entities which discriminate on the basis of sex in providing any aid, benefit or service to students or employees).

<u>See also</u> 34 C.F.R. § 100, Appendix B, part K (Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, National Origin, Sex, and Handicap in Vocational Education Programs) ("if a recipient can demonstrate that . . . criteria [that disproportionately exclude persons of a particular race, color, national origin, sex, or disability] have been validated as essential to participation in a given program and that

Due process challenges to the use of tests fall into two categories, substantive and procedural due process. Analyses under the due process clause address whether students have been denied, based on test scores, educational benefits or opportunities to which they had a legitimate claim of entitlement. Such cases typically involve a procedural due process claim that students were not given sufficient notice of the test and its requirements, or a substantive due process claim that the students were not taught the material on which the tests were based. <u>Debra P.</u>, 644 F.2d at 404-405; <u>Crump v. Gilmer Independent School District</u>, 797 F. Supp. 552, 555-556 (E.D.Tex. 1992); cf. <u>Williams v. Austin Independent School District</u>, 796 F. Supp. 251 (W.D.Tex. 1992).

<sup>15</sup> Some federal courts have addressed challenges to the use of tests for high-stakes purposes under the equal protection and due process clauses of the Fourteenth Amendment to the U.S. Constitution. Although OCR enforces statutory rights under Title VI and Title IX rather than constitutional rights, to the extent the claim is that a school district's use of tests is discriminatory, those actions may violate both the statutes and the Constitution. Some federal cases in which discrimination claims have been raised have also involved equal protection challenges to a jurisdiction's use of tests in which the claim is based not on race or sex discrimination, but on the jurisdiction's use of tests to determine, for example, those students who should be allowed to graduate. Under these circumstances, the claim is reviewed under the rational basis standard and the jurisdiction need show only that the use of the tests has a rational relation to a valid state interest. See <u>Debra P. v. Turlington</u>, 644 F.2d 397, 406 (5th Cir. 1981); <u>Erik V. v. Causby</u>, 977 F. Supp. 384, 389 (E.D.N.C. 1997).

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alternative equally valid criteria that do not have such a disproportionate adverse effect are unavailable, the criteria will be judged nondiscriminatory. Examples of admission criteria that must meet this test or assessment procedure are ... interest inventories ... and standardized test or assessment procedures").

#### II. Disparate Impact Analysis

Because the regulations that implement Title VI and Title IX incorporate an effects standard, a recipient's use of facially neutral policies that have a disparate impact on the basis of race, national origin, or sex may constitute a violation of Title VI or Title IX. See 34 C.F.R. § 100.3(b)(2); 34 C.F.R. § 106.21(b)(2); 34 C.F.R. § 106.36(b); 34 C.F.R. § 106.52. See also Guardians Assn. v. City Service Commission of City of N.Y., 463 U.S. 582 (1983) Lau v. Nichols, 414 U.S. 563 (1974). See also Attachment B: Memorandum from the Attorney General for Heads of Department and Agencies that Provide Federal Financial Assistance, "Use of the Disparate Impact Standard in Administrative Regulations under Title VI of the Civil Rights Act," July 14, 1994.

#### A. Establishing Disparate Impact

There is no rigid mathematical threshold that must be met to demonstrate a disparate impact. Watson v. Fort Worth Bank and Trust, 487 U.S. 977, 994-95 (1988) ("statistical disparities must be sufficiently substantial to raise ... an inference of causation," i.e., "show that the practice in question caused the exclusion of applicants for jobs or promotions because of their membership in a protected group").

Groves v. Alabama State Board of Education, 776 F.Supp. 1518, 1523-1529 (M.D. Ala. 1991) (discussion on establishing a statistical prima facie case of disparate impact).

Georgia State Conference of Branches of NAACP, supra at 1421 ("Generally, to establish a <u>prima facie</u> case of disparate impact based on race the plaintiffs must show that the defendants' racially neutral practice detrimentally affects persons of a particular race to a greater extent than other races. . . ").

#### B. Establishing Educational Necessity

The use of an educational test or assessment procedure which has a disparate impact on members of any race, national origin, or sex group is discriminatory, and a violation of Title VI or Title IX, unless the recipient justifies the use as educationally necessary. See Board of Education v. Harris, 444 U.S. 130, 151 (1979) (in disparate impact cases in the education context defendants are required to show an educational necessity instead of a business necessity); Griggs v. Duke Power Company, 401 U.S. 424 (1971) (sets similar standard for disparate impact of an employment test or assessment procedure); Branches of NAACP v. State of Georgia, 775 F.2d 1403, 1417 (11th Cir.

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1985); and <u>Sharif v. New York State Education Department</u>, 709 F.Supp. 345 (S.D. N.Y. 1989)(standard for disparate impact of an educational test or assessment procedure is educational necessity).

<u>See also</u> Memorandum from then Acting Assistant Secretary for Civil Rights, Alicia Coro, to then Acting Regional Civil Rights Director, Region V, Linda A. McGovern (PCD # 70 October 22, 1986)(standard in case involving alleged disparate impact of LSAT scores as an admissions criterion at DePaul University College of Law and Illinois Institute of Technology/Chicago/Kent College of Law, is educational necessity).

Whether a test or assessment procedure is educationally necessary depends on whether the test or assessment procedure is valid for the purpose for which it is being used. Sharif, supra; State of Georgia, supra; cf. Final Order of the Civil Rights Reviewing Authority, Dillon County School District No. 1, Docket No.84-IV-16.

The Guidance is consistent with professional standards - <u>See APA Standards</u> and the <u>Code of Fair Testing Practices in Education</u>.

#### 1. Validity

Memorandum from Harry M. Singleton to John E. Palomino (PCD # 57 April 4, 1985)(valid test or assessment procedures "successfully measure what they claim to measure; are used only for the specific purpose(s) for which they were developed; and, are administered in conformance with the instructions provided by the publisher").

See APA Standards at p. 11 (defining criterion-related evidence) and standard 1.11, 1.12, 1.18 (describing criterion-related validation studies).

<u>See APA Standards</u> at p. 10 (defining content-related evidence) and standard 1.6 and 1.7 (describing content-related validation studies).

<u>See APA Standards</u> at p. 9 (defining construct-related evidence) and standard 1.8, 1.9, and 1.10 (describing construct-related validation studies).

Larry P. v. Riles, 495 F. Supp. 926 (N.D. Cal. 1979), affd, 793 F.2d 969 (9th Cir. 1984) (State of California, requesting approval from the court to use standardized IQ test or assessment procedures for the purpose of placing black children in EMR classes, required to, among other things, provide statistics showing the mean scores of blacks and whites on the test or assessment procedure and information supporting the validity of the test or assessment procedure for the purpose of identifying and placing students in EMR classes).

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<u>Debra P. v. Turlington</u>, 730 F.2d 1405 (11th Cir. 1984)(court approved validity study which consisted of a number of surveys and site visits that analyzed whether the students had received the instruction necessary for them to have mastered the skills that were being tested).

See also Code of Fair Testing Practices in Education at A-1 and A-7 (encouraging test developers to describe the population for which the test is appropriate and encouraging test users to select tests appropriate for the testing purpose and population of test takers).

American Psychological Association Standards for Educational and Psychological Testing (1985) (APA Standards) at standard 1.16 (permitting criterion-related validation inferences to be drawn from a set of prior studies, where "local validation evidence" is not available, depending on the degree of similarity between the test or assessment procedure use and validation sample); and at pp. 12-13 (describing the concept of differential prediction).

#### 2. Reliability

APA Standards at pp. 19-20 (discussing reliability and error of measurement).

#### 3. Cutoff scores

Evans v. City of Evanston, 881 F.2d 382 (7th Cir. 1989) (while test was valid for the job, cutoff score was set one standard deviation above the mean; the court rejected this because there was no attempt to connect the score to level of performance: "...the ability to perform firefighting tasks adequately depends not on relative but on absolute test performance.").

Richardson v. Lamar County Bd. of Education, 729 F. Supp. 806 (M.D. Ala. 1989) (passing score rejected because of the lack of any relationship to actually measuring competence; instead, based on what was "politically acceptable").

<u>APA Standards</u> at standard 6.9 (when a specific cut-off score is used to select, classify or certify test takers, the method and rationale for setting that cut score, including any technical analyses, should be presented in a manual or report).

#### C. Alternatives With Less Disparate Impact

Albemarle Paper Co. v. Moody, 422 U.S. 405, 425 (1975)(in Title VII case challenging use of employment test that had a disparate impact, court stated that

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employee can still prevail, even if test is valid, if other tests or selection devices with less disparate impact would serve the employer's interests).

NAACP v. State of Georgia, 775 F.2d. 1403 (11th Cir. 1985) (considering less discriminatory alternatives in Title VI education context).

Sharif v. New York State Education Department, 709 F.Supp. 345 (S.D.N.Y. 1989) (where use of the SAT had a disparate impact based on sex in awarding state merit scholarships, court approved awards being based on a combination system - using both grade point averages and SAT scores - as a legally sufficient alternative to sole reliance on the SAT; court found that, compared with sole reliance on the SAT, combination system would better advance the state's goal of awarding high school performance and would better provide all students with an equal opportunity to compete for prestigious state scholarships; court found that feasibility argument about the combination system advanced by the state education agency lacked merit).

Bridgeport Guardians, Inc. v. City of Bridgeport, 735 F. Supp. 1126, 1136-1137 (D. Conn. 1990), affd, 933 F.2d 1140, 1148 (2nd Cir. 1991), cert. denied, 502 U.S. 924 (1991) (where making promotion decisions for police department on a strict rank-order basis based on examination scores had a disparate impact on racial minority candidates, district court rejected the use of video simulations as an alternate selection criteria on the basis that they have generally not increased the relative standing of minority candidates and because it substantially adds to the cost of the promotion process; district court approved use of banding as an alternate selection criteria as it found that there is no evidence that any added burdens that a banding analysis would impose are more than minimal; appeals court upheld the use of banding noting, based on testimony from the city's industrial psychologist, that small variances in the examination scores did not indicate that there were real differences in the qualifications of the candidates).

Brunet v. City of Columbus, 1 F.3d 390, 411-412 (6th Cir. 1993), cert. denied, 510 U.S. 1164 (1994) (where making hiring decisions for fire fighter positions on a strict rank-order basis based on the results of a physical capability test (PCT) and a cognitive ability test (CAT) had a disparate impact on the basis of sex, although the appeals court rejected both alternatives presented by the plaintiffs, the appeals court found error because there was no indication in the record that the district court required the city, pursuant to the Uniform Guidelines on Employee Selection Procedures, to conduct its own investigation of viable alternatives with lesser or no impact on female applicants before implementing the strict rank-order process; the appeals court also found nothing in the record that requires the CAT and the PCT to be weighted equally; the appeals court also

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indicated that the city should be required to demonstrate why the CAT, which arguably is more predictive than the PCT, should not be weighted more than the PCT, noting that the change might result in a lesser disparate impact on women).

FairTest v. College Entrance Examination Board and Educational Testing Service, OCR Case No. 02-94-2048 (where use of the PSAT had disparate impact based on sex in selecting National Merit Scholarship semi-finalists, recipients agreed to modify the test to include a writing skills component and to study whether academic records could also be considered).

#### III. Different Treatment Analysis

As with other claims of race, national origin, or sex discrimination under Title VI and Title IX, a different treatment analysis may apply when a policy or practice regarding testing or assessment is being applied differently by an educational institution to different groups of students because of their race, national origin, or sex. This is the touchstone of what is a classic violation of Title VI and Title IX and their implementing regulations.

Where there is direct evidence that an educational decision was made based on race, national origin, or sex, a prima facie violation of Title VI or Title IX has been established. The recipient then has the burden of establishing a legitimate reason (an affirmative defense) for the different treatment, such as showing that the disparate treatment was the result of a valid affirmative action plan. See Regents of the University of California v. Bakke, 438 U.S. 265, 320 (1978) (Although the U.S. Supreme Court found that an applicant to medical school had been discriminated against on the basis of race under an unlawful admissions process, five justices agreed that the portion of the lower court decision that enjoined the university from ever considering the race of any applicant should be reversed. Justice Powell recognized that the "State has a substantial interest that legitimately may be served by a properly devised admissions program involving the competitive consideration of race or ethnic origin.") But see Hopwood v. Texas, 78 F.3d 932 (5th Cir. 1996), cert. denied, 518 U.S. 1033 (1996) (The Fifth Circuit held that a university's interest in achieving a diverse student body can never constitute a compelling governmental interest justifying the use of race in university admissions selections.)

Note that there need not be direct proof of intentional discrimination in order to make a disparate treatment case. "In most disparate treatment cases, intent to discriminate is established inferentially, through circumstantial evidence." Equal Employment Opportunity Commission's "Revised Enforcement Guidance on Recent Developments in Disparate Treatment Theory," July 14, 1992, Number N 915.002. at 2. The basic elements of a different treatment case in which there is no direct evidence of discrimination were set out by the U.S. Supreme Court in McDonnell Douglas Corp. v. Green, 411 U.S. 792 (1973), a Title VII employment case. See also United States Postal Service Board of Governors v. Aikens, 460 U.S. 711 (1983); Texas Department of Community Affairs v. Burdine, 450 U.S. 248 (1981).

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#### IV. Analysis Where Prior Dual System

<u>United States v. Fordice</u>, 112 S.Ct. 2727 (1992) (Mississippi's admission policy which required higher ACT scores for historically white public universities than for historically black public universities was constitutionally suspect as it was originally enacted by historically white universities to maintain prior dual system of higher education. States and schools districts that have operated a dual system have an obligation to dismantle the prior <u>de jure</u> segregated system.).

Knight v. Alabama, 14 F.3d 1534, 1540-42 (11th Cir.1994) (A recipient's "burden of proving that [less discriminatory] alternatives are impractical or educationally unsound is a heavy one.").

<u>Debra P. v. Turlington</u>, 644 F.2d 397, 407 (5th Cir. 1981) (In an equal protection challenge to the requirement that students pass a functional literacy test or assessment procedure to receive a high school diploma, trial court instructed to consider whether disproportionate failures of black students could be attributed, in part, to unequal education received during period of dual school system).

#### TAB A

# SAMPLE QUESTIONS FOR EVALUATING EVIDENCE OF EDUCATIONAL NECESSITY AND DETERMINING WHETHER THERE ARE PRACTICABLE ALTERNATIVES WITH LESS DISPARATE IMPACT

Once it has been determined that a test or assessment procedure has a disparate impact on students of a particular race, national origin, or sex, there should be an inquiry into the test or assessment procedure's educational necessity. Educational necessity means that the challenged test or assessment procedure is valid and reliable for the purpose for which it is being used. There should then be an inquiry to determine whether there are any practicable alternatives to the test or assessment procedure that are available, which would (i) substantially serve the educational purpose identified by the educational institution, (ii) be valid and reliable for that purpose, and (iii) have a lesser disparate impact.

As stated in the resource guide, evidence of the general reputation of a test or assessment procedure is not sufficient to establish validity. Also, a manual developed by the test or assessment procedure publisher is not presumptive evidence of validity. Rather, the use of a test or assessment procedure may be supported by validity studies of the same test conducted by the school, other schools, test publishers or distributors, or professional researchers.

The following questions are designed to assist OCR staff and members of the educational community in evaluating evidence of educational necessity and in determining whether there are any practicable alternatives to the test or assessment procedure which would meet the educational institution's educational needs and have a lesser disparate impact:

- 1. What test or assessment procedure is the educational institution administering?
- 2. For what purpose is the test or assessment procedure being administered (purpose should be stated in specific terms, <u>i.e.</u>, predicting grades in algebra, rather than in general terms, <u>i.e.</u>, measuring intelligence of seventh-graders)?
- 3. What is the educational institution's justification for the purpose for which the test or assessment procedure is being used? If the school cannot show that the test is educationally necessary, the use of the test or assessment procedure will be in violation of Title VI or Title IX, as appropriate.
- 4. For what purpose was the test or assessment procedure developed (if it is clear from preliminary evidence)? Is the school using the test or assessment procedure for this purpose? If not, the use of the test or assessment procedure cannot be justified as educationally necessary and will be in violation of Title VI or Title IX, as appropriate.

- 5. Is the test or assessment procedure being used as the sole criterion for making an educational decision? If so, was the test or assessment procedure designed to be used this way? If not, the test or assessment procedure used cannot be justified as educationally necessary and there is a violation of federal law.
- 6. What is the racial, ethnic, and/or sex composition of the test or assessment procedure-taking population?
- 7. Does the school have evidence that it has developed or that has been developed by the test or assessment procedure publisher that the test or assessment procedure is valid and reliable for the purpose for which it is being used?
- a. What is the form of the evidence, <u>i.e.</u>, study or report? Raw data or very general information is <u>not</u> acceptable evidence of the validity of a test or assessment procedure.
- b. Who conducted the study, <u>i.e.</u>, the school, another school, the test or assessment procedure developer, an independent researcher?
  - c. How long ago was the study conducted?
- d. Is there evidence under professionally accepted standards that the test or assessment procedure is valid and reliable?
- e. For what use was the test or assessment procedure validated? Is this use identical to, or the professionally accepted equivalent of, the purpose for which the school is using the test or assessment procedure?
  - f. Was the test or assessment procedure administered and scored properly?
    - i. Were all the students treated the same way as to how the test or procedure was administered or scored?
    - ii. Did school officials clearly articulate to school personnel who administered, scored, or interpreted the results the construct(s) or variable(s) the procedure was designed to measure?
    - iii. Did those who administered, scored, or interpreted the results have the appropriate skills to perform these functions adequately? For example, are those who interpret the scores able to understand and interpret commonly reported scores, such as percentile ranks, standard scores, stanines, normed curve equivalents, and grade equivalents (as appropriate to the particular test)? Are

they able to understand and interpret commonly reported summary indexes such as central tendency measures, estimates of reliabilities, and standard errors of measurement (again, as appropriate to the particular test)?

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- 8. What type of statistical test was used in the validation study upon which the school relies?
- 9. If the school has empirical evidence that the test or assessment procedure is valid and reliable for the purpose for which it is being used, has the school looked at whether there are practicable alternatives to the test or assessment procedure with less impact that would substantially serve the school's stated purpose and that are valid and reliable for that purpose?
- a. How great was the disparate impact caused by the challenged test or assessment procedure?
  - b. What alternatives has the school looked at?
- c. Did the criteria or criterion have less impact than the challenged test or assessment procedure?
  - d. If the school did not look at alternatives, what is the reason for this decision?
- e. If the school did look at alternatives, but chose not to use them, what is the reason for this decision?
- 10. Are there one or more criteria which, either alone, or in combination with other criteria, would have less impact, serve the school's educational purpose, and be valid and reliable for that purpose?
- 11. Does the school use a "cutoff score" on the test or assessment procedure which determines whether a student receives an educational benefit or opportunity? If so:
- a. Does the cutoff score have a disparate impact on students of a particular race, national origin, or sex?
- b. Is the cutoff score being used as the sole criterion for making an educational decision? If so, was the cutoff score designed to be used in this way? If not, the use of the cutoff score cannot be justified as educationally necessary and there is a violation of federal law.
- c. Does the school have evidence regarding the method and rationale for setting the cutoff score?
- d. Does the evidence provided under c. reflect a systematic process that evidences the good faith exercise of professional judgment?

#### TAB B

#### LIST OF POLICY AND TECHNICAL ASSISTANCE DOCUMENTS ADDRESSING THE CLASSIFICATION OF STUDENTS AND THE NONDISCRIMINATORY PROVISION OF SERVICES<sup>16</sup>

#### I. Provision of Educational Services to Limited-English Proficient Students

U.S. Department of Education, Office for Civil Rights. (1991). "Policy Update on Schools' Obligations Toward National Origin Minority Students With Limited-English Proficiency."

This policy update is primarily designed for use by OCR staff to determine whether schools are complying with their obligation under Title VI to provide any alternative language programs necessary to ensure that national origin minority students with limited-English proficiency (LEP) have meaningful access to schools' programs. The policy update provides additional guidance for applying the May 1970 and December 1985 memoranda, which are described below.

U.S. Department of Education, Office for Civil Rights. (1985). "The Office for Civil Rights' Title VI Language Minority Compliance Procedures."

This memorandum provides a description of the procedures followed by OCR in making determinations of compliance with Title VI as regards the treatment of LEP students in educational programs that receive federal financial assistance from the Department of Education.

U.S. Department of Education, Office for Civil Rights. (1970). "Identification of Discrimination and Denial of Services on the Basis of National Origin," 35 Fed. Reg. 11595 (May 1970 Memorandum)

This memorandum was designed to clarify the policy of the Department of Health, Education and Welfare, now the Department of Education, on issues concerning the responsibility of school districts to provide equal educational opportunity to LEP students. This memorandum was a foundation for the

<sup>&</sup>lt;sup>16</sup> The policy and technical assistance documents that are listed were either developed by the U.S. Department of Education's Office for Civil Rights or were developed by other organizations, where the U.S. Department of Education was a contributing party.

U.S. Supreme Court's decision in <u>Lau</u> v. <u>Nichols</u>, 414 U.S. 653 (1974). The memorandum was affirmed by the U.S. Supreme Court in the <u>Lau</u> decision.

August D. & Hakuta, K. (Eds.). (1997). Improving America's Schools for Language-Minority Children: A Research Agenda. Committee on Developing a Research Agenda on the Education of Limited-English-Proficient and Bilingual Students, National Research Council. Washington, D.C.: National Academy Press.

The National Research Council (NRC) completed an extensive study of LEP students, which is summarized in this report. The report provides a review of the state of knowledge regarding the education of LEP students and identifies a research agenda that will address key gaps in present knowledge on the topic. Among the topics covered in the report are student assessment and program evaluation.

U.S. Department of Education, Office for Civil Rights. (1991). "Technical Assistance Resource Package on the Provision of Equal Educational Opportunity to National Origin Minority and Native American Students Who Are Limited-English-Proficient."

This resource package focuses on the provision of equal educational opportunities to national origin minority and native American students who are limited-English-proficient. The package contains: 1) information about the history and importance of issues pertaining to the education of LEP students; 2) technical definitions and explanations of prominent educational approaches to teaching LEP students; 3) a summary of case law regarding civil rights requirements for educating LEP students; 4) a summary of compliance review letters of findings; 5) summaries and listings of major research publications, studies, and reports addressing LEP issues; and 6) a listing of major professional and beneficiary organizations involved in gathering information about LEP issues.

#### II. Minority Students and Special Education

U.S. Department of Education, Office for Civil Rights. (1995). "Minority Students and Special Education - Legal Approaches for Investigations."

This memorandum provides an overview of the legal theories and approaches to be employed in OCR investigations regarding the disproportionate representation of minority students in special education.

Markowitz, J., García, S., & Eichelberger, J.H. (1997). Addressing the Disproportionate Representation of Students from Racial and Ethnic Groups in Special Education: A Resource Document. Alexandria, VA: Project FORUM, National Association of State Directors of Special Education.

This document is intended to enhance the knowledge base of technical assistance providers to enable them to provide more effective technical assistance and guidance to state and local education personnel who are addressing the problem of disproportionate representation. The document includes a compilation of approaches that have the potential for effectively preventing and correcting disproportionate representation, an annotated bibliography of print resources, and a list of individuals who are knowledgeable about one or more of the main topic areas presented in this document.

Morison, P., White, S.H., & Feuer, M.J. (Eds.) (1996).

The Use of IQ Tests in Special Education Decision Making and Planning: Summary of Two Workshops. Board on Testing and Assessment, National Research Council. Washington, D.C.: National Academy Press.

To assist the U.S. Department of Education, the Board on Testing and Assessment convened two workshops to facilitate an examination and discussion of research evidence regarding the uses of intelligence tests (IQ) tests in special education placement decisions, with particular focus on mental retardation and learning disabilities. The workshops had the following objectives: 1) to provide an overview of legal, policy, and measurement issues regarding the use of IQ tests in special education; 2) to examine issues related to the validity and fairness of IQ testing for classification and placement of students in special programs, with emphasis on potential adverse effects on minority students; and 3) to explore some possible alternative assessment methods that could be used in combination - or as substitutes for traditional IQ tests. The summary report provides a synthesis of the key themes and ideas discussed at the workshops.

#### TAB C

#### VALIDITY, A GLOSSARY

#### Introduction

"Validation is the most important consideration in test evaluation. ...Test validation is the process of accumulating evidence to support ... inferences (made from test scores)."

(American Psychological Association Standards for Educational and Psychological Testing (1985). (APA Standards at p. 9).

In general the inference that a test or assessment procedure is valid is justified when the research evidence indicates the following is true:

- 1. the test or assessment procedure measures the construct (characteristic, property, skill, ability, capacity, or behavior) it was intended to measure;
- 2. the test or assessment procedure is used in a correct and appropriate manner, with regard to testing setting, testing procedure (including the qualifications of the test-giver and the manner in which the test is given), tested sample of people (e.g., using a test validated for adults to assess children would be improper); and
- 3. the inferences drawn from the resulting test or assessment procedure data are appropriate and correct.

"Traditionally, the various means of accumulating validity evidence have been grouped into categories called content-related, criterion-related, and construct-related evidence of validity. ... These categories are convenient ... but the use of the category labels does not imply there are distinct types of validity or that a specific validation strategy is best for each specific inference or test use ... An ideal validation includes several types of evidence, which span all three of the traditional categories ... Professional judgment should guide the decisions regarding the forms of evidence that are most necessary and feasible in light of the intended uses of the test and any likely alternatives to testing." (APA Standards at p. 9).

Evidence can be gathered by use of such particular statistical techniques as correlation and regression analyses with test items or scores and other test or non-test variables, factor analysis, item response theory (IRT) and other level of difficulty techniques, and differential item functioning (DIF) analyses. It might also be gathered by the systematic judgment evaluation of individual responses, or a formal evaluation of one or a number of test construction, implementation, or data analytic processes. (Aiken, 1994; Holland and Wainer, 1993; Wainer and Braun, 1988).

Regardless of technique, evidence is obtained which demonstrates that information derived from the assessment is accurately reflective of what is supposed to be measured. This is done by designing investigations which focus on convergence, or high positive relationships, and discriminatory analyses, which seek to demonstrate divergence between the assessment information and related, but distinct, variables.

#### Construct-Related Validity<sup>17</sup>

Construct-related evidence of validity is "evidence that supports a proposed construct interpretation of scores on a test based on theoretical implications associated with the construct label." (APA Standards at p. 90). The construct-related validity of a test or assessment procedure is the extent to which the assessment may be said to measure a theoretical construct or trait. (Aiken, 1994; Anastasi, 1988; Groth-Marnat, 1990). "Reasoning ability, spatial visualization, and reading comprehension are constructs ...The construct of interest for a particular test should be embedded in a conceptual framework ... The conceptual framework specifies the meaning of the construct, distinguishes it from other constructs, and indicates how measures of the construct should relate to other variables." (APA Standards at pp. 9 - 10).

Any data throwing light on the nature of the trait under consideration and the conditions affecting its development and manifestations represents appropriate evidence for this validation. (Anastasi, 1988). AThe process of compiling construct-related evidence for test validity starts with test development and continues until the pattern of empirical relationships between test scores and other variables clearly indicates the meaning of the test score. "[V]alidating inferences about a construct also requires paying careful attention to aspects of measurement such as test format, administration conditions, or language level, that may affect test meaning and interpretation materially." (APA Standards at p. 10).

Construct validity, which is the most general type of validity, is not determined by a single way or by one investigation. Rather it involves a network of investigations and other procedures designed to determine whether an assessment instrument that purportedly measures a certain variable is actually doing its job. (Aiken, 1994; Groth- Marnat, 1990).

accepted existing professional standards when evaluating the validity and reliability of a test or assessment procedure. However, it should be noted that there is a trend among measurement theorists to consider construct validity to be the fundamental, unifying framework for conceptualizing validity evaluations (see, e.g., Shepard, 1993, and Wainer and Braun, 1988). Under this framework, since all validation is subsumed under construct validation, there are not different types of validity. Also, as part of this framework, various sources of evidence, including, but not necessarily limited to, content-related evidence, criterion-related evidence, and prediction-related evidence, can be, and usually are, used to evaluate the degree to which score-based inferences and actions are supported. Some testing and assessment experts include such additional evidence as the consequences of test use on individuals and groups in society as part of the construct validity framework (Messick, 1989).

#### Content-Related Evidence of Validity

Content-related evidence of validity is "evidence that shows the extent to which the content domain of a test is appropriate relative to its intended purpose." (APA Standards at p. 90). "In general, content-related evidence demonstrates the degree to which the sample of items, tasks, or questions on a test are representative of some defined universe or domain of content. ... For some educational decisions, it is important to determine the agreement between the test and the curricular or instructional domains it is meant to cover. ... [I] nferences about content are linked to test construction as well as to establishing evidence of validity after a test has been developed and chosen for use." (APA Standards at pp. 9-10).

Content validity is concerned with whether the content of the test or assessment procedure elicit the range of responses representing the entire domain or universe of skills, understandings, or other behaviors that the test or assessment procedure was supposed to measure (Gregory, 1992; Aiken, 1994; Anastasi, 1988). "Methods classed in the content-related category should often be concerned with the ... construct underlying the test as well as the character of test content. There is often no sharp distinction between test content and test construct." (APA Standards at p. 11.).

#### Criterion Validity18

Criterion-related evidence of validity "demonstrates that test scores are systematically related to one or more outcome criteria." (APA Standards at p. 11). This type of validity evidence is produced by relating scores on the test or assessment procedure to performance criterion measures, standards, or variables (Aiken, 1994). According to Anastasi (1988), a criterion is a direct and independent measure of that which the test is designed to predict. Criterion-related procedures indicate the effectiveness of the assessment where performance on the test is checked against a criterion. "The choice of the criterion and the measurement procedures used to obtain criterion scores are of central importance. Logically, the value of a criterion-related study depends on the relevance of the criterion measure that is used." (APA Standards at p. 11).

Two types of criterion-related evidence are those obtained from investigations which focus on prediction and those which focus on concurrent relationships. "Two designs for obtaining criterion-related evidence - predictive and concurrent - can be distinguished. A predictive study obtains information about the accuracy with which early test data can be used to estimate criterion scores that will be obtained in the future. A concurrent study serves the same purpose, but it obtains prediction and criterion information simultaneously. Predictive

<sup>&</sup>lt;sup>18</sup> Correlations between a test and a criterion are validity coefficients. A study of predictive or concurrent validity is nearly always reported in terms of a correlation coefficient. Cronbach, L.J. (1990). Essentials of Psychological Testing (5th ed.). New York: Harper Collins Publishers. Inc.

studies are frequently, but not always, preferable to concurrent studies of selection tests for education or employment, whereas concurrent evidence is usually preferable for achievement tests, tests used for certification, diagnostic clinical tests, or for tests used as measures of a specified construct." (APA Standards at p. 11).

#### TAB D

#### BIBLIOGRAPHY

#### Selected Validity References

Aiken, L.R. (1994). <u>Psychological Testing and Assessment</u>, (8th ed.). Needham Heights, MA: Allyn and Bacon.

American Educational Research Association, American Psychological Association, National Council on Measurement in Education. (1985). <u>Standards for Educational and Psychological Testing</u>.

Anastasi, A. (1988). <u>Psychological Testing</u> (6th ed.). New York: Macmillan Publishing Company.

Anastasi, A. (1986). "Evolving Concepts of Test Validation." <u>Annual Review of Psychology</u>, 37, 1-15.

Carver, C.S., & Schier, M.F. (1996). <u>Perspectives on Personality</u> (3rd ed.). Needham Heights, MA: Akkyn & Bacon.

Cattell, R.B. (1964). "Validity and reliability: A proposed more basic set of concepts." Journal of Educational Psychology, 55(1), 1-22.

Corsini, R.J., & Marsella, A.J. (1983). <u>Personality Theories</u>, <u>Research</u>, and <u>Assessment</u>. Itasca. IL: F.E. Peacock Publishers.

Cronbach, L.J. (1990). <u>Essentials of Psychological Testing</u>, (5th ed.). New York: Harper Collins Publishers, Inc.

Cureton, E.E. (1968). <u>International Encyclopedia of the Social Sciences</u>. U.S.A.: Crowell, Collier and Macmillan.

Ebel, R.L., & Frisbie, D.A. (1991). <u>Essentials of Educational Measurement</u> (5th ed.). Englewood, NJ: Prentice Hall.

English, H.B. & English, A.C. (1962). <u>A Comprehensive Dictionary of Psychological and Psychoanalytic Terms</u>. U.S.A.: David McKay Company, Inc.

4/99 DRAFT: For Internal Governmental Handling Only, Tab D - 2

Funder, D.C. (1997). The Personality Puzzle. New York: W.W. Norton & Company.

Gatewood, R., & Field, H. (1994). <u>Human Resource Selection</u>. Fort Worth: Dryden Press.

Gregory, R.J. (1992). <u>Psychological Testing: History, Principles, and Applications</u>. Needham Heights, MA: Allyn and Bacon.

Groth-Marnat, G. (1990). <u>Handbook of Psychological Assessment</u> (2nd ed.). New York: John Wiley and Sons.

Hartigan, J., & Wigdor, A. (1989). <u>Fairness in Employment Testing</u>. Committee on the General Aptitude Test Battery, National Research Council. Washington, DC: National Academy Press.

Holland, P.W. & Wainer, H. (Eds.). (1993). <u>Differential Item Functioning</u>. Hillsdale, NJ: Lawrence Erlbaum Associates.

McCloskey, D., & Ziliak, S. (1996). "The standard error of regressions." <u>Journal of Economic</u> Literature, 37, 97-114.

Meir, R. (1994). The Chronic Crisis in Psychological Measurement and Assessment: A Historical Survey. New York: Academic Press.

Messick, S. (1989). "Validity." In R.E. Linn (Ed.), <u>Educational Measurement</u> (3rd ed.). New York: Macmillan.

National Research Council. (1998). <u>High Stakes Testing for Tracking, Promotion.</u> and <u>Graduation</u>. Washington, D.C.: National Academy Press.

Office of Technology Assessment. (1992). <u>Testing in American Schools: Asking the Right Questions</u>. OTA-SET-519. Washington, DC: U.S. Government Printing Office.

Reilly, R., & Warech, M. (1994). "The validity and fairness of alternative to cognitive tests." In H. Wing & B. Gifford (Eds.), <u>Policy Issues in Employment Testing</u>. Boston: Kluwer.

Rust, J., & Golombok, S. (1989). <u>Modern Psychometrics: The Science of Psychological Assessment</u>. New York: Routledge.

Shepard, L.A. (1993). "Evaluating Test Validity." <u>Review of Research in Education</u>, 19, 405-450.

Travers, B.E. (Ed.). (1996). The Gale Encyclopedia of Science. Detroit: Gale Research.

Wainer, H., & Braun, H. (Eds.). (1988). Test Validity. Hillsdale, NJ: Hove and London.

4/99 DRAFT: For Internal Governmental Handling Only Tab D - 3

## Selected References Regarding Appropriate Test Use In The Context of Standards-Based Reform

Coleman, A.L., "Excellence and Equity in Education: High Standards for High-Stakes Tests." 6 Virginia Journal of Social Policy & the Law 81(1998).

Federation for Children with Special Needs. (1998). All Kids Count.

Hansche, L.N. (1998). <u>Handbook for the Development of Performance Standards: Meeting the Requirements of Title I</u>. Washington, D.C.: Council of Chief State School Officers and the U.S. Department of Education.

Jaeger, R.M. & Tucker, C.G. (1998). <u>Analyzing, Disaggregating, Reporting, and Interpreting Students' Achievement Test Results: A Guide to Practice for Title I and Beyond</u>. Washington, D.C.: Council of Chief State School Officers.

Kopriva, R.J. & Saez, S.M. (1997). <u>Guide for Scoring Open-Ended Mathematics Responses of LEP Students</u>. Washington, D.C.: Council of Chief State School Officers.

Kopriva, R.J. (in press). <u>Ensuring the Accurate Assessment of LEP Students: A Practical Guide for Test Development</u>. Washington D.C.: Council of Chief State School Officers.

Linn, R.L. & Herman, J.L. (1997). <u>A Policymaker's Guide to Standards-Led Assessment</u>. Denver, CO: Education Commission of the States.

National Research Council. (1999). <u>High Stakes Testing for Tracking, Promotion, and Graduation</u>. Washington, D.C.: National Academy Press.

Tucker, M. & Codding, J. (1998). <u>The State of Standards: Powerful Tool or Symbolic Gesture?</u> Washington, D.C.: National Center on Education and the Economy. U.S. Department of Education, Office of Educational Research and Improvement. (1997). Assessment of Student Performant.

U.S. Department of Education, Office of Elementary and Secondary Education. (in progress). <u>Toolkit for the Assessment of Language Minority Students</u>.

U.S. Department of Education, Standards, Assessments, and Accountability. (1997). http://www.ed.gov/pubs/legsregs.html#policy. http://www.ed.gov/offices/OESE/policy.html

## Attachment - A



## UNITED STATES DEPARTMENT OF EDUCATION WASHINGTON, D.C. 20202

SEP 29 1997

### Dear Colleague:

We are writing to you today to highlight the importance of including students with disabilities in all educational reform activities and, in particular, in statewide assessment systems. As you know, President Clinton has announced a bold, national education initiative which includes the goal of learning to challenging and clear standards of achievement for all students, including students with disabilities. In his 1997 State of the Union address, the President announced a ten-point call to action including rigorous, voluntary national tests in reading and math embodying national standards, teaching every student to read independently by the end of the third grade, and increased accountability in public education.

Assessment is an integral aspect of accountability. Assessment systems have varied purposes. Whatever the focus of the particular assessment system - program evaluation, school and staff accountability or measuring student progress - assessments provide valuable information which benefits individual students, either directly, such as in the measurement of individual progress against standards, or indirectly, such as in evaluating programs. Given the emphasis on assessment in recent educational reform efforts, including State and Federal legislation linking assessment and school accountability, it is of utmost importance that students with disabilities be included in the development and implementation of assessment activities. Too often, in the past, students with disabilities have not fully participated in State and district assessments only to be short-changed by the low expectations and less challenging curriculum that may result from exclusion.

Given the benefits that accrue as a result of assessment, exclusion from assessments based on disability generally would not only undermine the value of the assessment but also violate Section 504 of the Rehabilitation Act of 1973 (Section 504), which prohibits exclusion from participation of, denial of benefits to, or discrimination against, in fiduals with disabilities on the basis of their disability in Federally-assisted programs or activities. 29 U.S.C. 794. Similarly Title II of the Americans with Disabilities Act (ADA) of 1990 provides that no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by such entity. 42 U.S.C. 12132.

### Page 2

The newly enacted Individuals with Disabilities Education Act Amendments of 1997 (IDEA) emphasizes improving results for children with disabilities. Consistent with an emphasis on results, IDEA contains requirements related to assessments. As a condition of eligibility, Part B of IDEA requires States to have policies and procedures to ensure that children with disabilities are included in general State and district-wide assessment programs, with appropriate accommodations, where necessary. Sec. 612(a)(17); 111 Stat. 67. Effective July 1, 1998, IDE /...quires that individualized education programs (IEPs) include a statement of any individual modifications in the administration of State or district-wide assessments of student achievement that are needed in order for the child to participate in such assessments; and if the IEP team determines that the child will not participate in a particular state or district-wide assessment of student achievement (or part of such assessment), the IEP must include a statement of why that assessment is not appropriate for the child; and how the child will be assessed. Section 614(d)(1)(A) (v); 111 Stat. 84.

In addition to inclusion in assessments, Section 504, Title II of the ADA, and IDEA require that students with disabilities must be provided with appropriate test accommodations, where necessary. Many students with disabilities who have, until now, been excluded can participate appropriately in assessments without any test adaptations or accommodations. However, for those students who need accommodations to participate in the assessment, appropriate accommodations must be provided. Among the possible accommodations in test presentation, response mode and setting are the following: oral administration, large print, Braille version, individual or separate room administration, extended time and multiple test sessions. The individualized determinations of whether a student will participate in a particular assessment, and what accommodations, if any, are appropriate should be addressed through the individualized education program process or other evaluation and placement process and included in either the student's IEP or Section 504 plan.

For the small number of students whose IEPs specify that they should be excluded from regular assessments, including some students with significant cognitive impairments, participation in regular assessments is not appropriate. For these students, Part B of IDEA requires that the State ensure that, as appropriate, the State or local agency (i) develops guidelines for the participation of children with disabilities in alternate assessments for those children who cannot participate in State and district-wide assessment programs; and (ii) develops and, beginning not later than July 1, 2000, conducts those alternate assessments. Section 612(a)(17)(A); 111 Stat.67. Some States are already implementing assessment models that include all students and use test adaptations, accommodations and alternate assessments, as appropriate.

Part B of IDEA also contains reporting requirements related to assessment. It requires that States have policies and procedures to ensure that the State educational agency makes available to the public (i) the number of children with disabilities participating in regular assessments; (ii) the number of those children participating in alternate assessments; and (iii) beginning not later than July 1, 1998, the performance of children with disabilities on regular assessments and not later than July 1, 2000, the performance of children with disabilities on

## Page 3

alternate assessments, if it can be reported in a statistically sound manner and would not result in disclosure of performance results identifiable to individual children. The reports must be provided with the same frequency and in the same level of detail as the State's reports on the assessment of nondisabled children. For assessments conducted after July 1, 1998, data relating to the performance of children with disabilities in regular assessments is required to be disaggregated. For those assessments conducted prior to July 1, 1998, the data for children such disabilities participating in regular assessments, is only required by IDEA to be disaggregated if the State requires disaggregation. Section 612(a)(17)(B); 111 Stat. 67-68.

The Office of Special Education Programs within OSERS has a cooperative agreement with the National Center on Educational Outcomes (NCEO) at the University of Minnesota to study and provide information on including students with disabilities in statewide and other assessments. We have enclosed a brochure on the NCEO, which may be contacted for more information.

As we work together to reform our educational system, we must ensure that all children, including students with disabilities, are part of that reform. Including students with disabilities in the development and implementation of assessments is a vital step towards providing access to the general curriculum and learning to challenging standards.

Sincerely,

Judith E. Heumann

Assistant Secretary for Special Education and Rehabilitative Services Norma V. Cantú

Assistant Secretary for

norma V. Cartie

Civil Rights

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## Attachment - B



## Office of the Attorney General Mashington. D. C. 20530

July 14, 1994

MEHORANDUM FOR HEADS OF DEPARTMENTS AND AGENCIES THAT PROVIDE FEDERAL PINANCIAL ASSISTANCE

FROM:

THE METOTAL GENERAL

SUBJECT:

Use of the Disparate Impact Standard in Administrative Regulations Under Title VI of the Civil Rights Act of 1964

This month marks the 30th anniversary of the passage of Title VI of the Civil Rights Act of 1964 (42 U.S.C. 552000d to 2000d-6), which prohibits discrimination on the basis of race, - color, or national origin in programs and activities that receive Federal financial assistance. The anniversary of this landmark legislation is a fitting time to remind agencies that administrative regulations implementing Title VI apply not only to intentional discrimination but also to policies and practices that have a discriminatory effect. In Guardians Association v. Civil Service Commission, 463 U.S. 582 (1983), the Supreme Court held that while Title VI itself requires proof of discriminatory intent, agencies may validly adopt regulations implementing Title VI that also prohibit discriminatory effects. Nearly all agencies have adopted such regulations. In Alexander v. Choate, 469 U.S. 287 (1985) (construing Section 504 of the Rehabilitation Act of 1973), a unanimous Supreme Court restated the holding in Guardians that disparate impact violations could be addressed through regulations implementing Title VI.

This Administration will vigorously enforce Title VI. As part of this effort, and to make certain that Title VI is not violated, each of you should ensure that the disparate impact provisions in your regulations are fully utilized so that all persons may enjoy equally the benefits of federally financed programs.

Enforcement of the disparate impact provisions is an essential component of an effective civil rights compliance program. Individuals continue to be denied, on the basis of their race, color, or national origin, the full and equal opportunity to participate in or receive the benefits of programs assisted by Federal funds. Frequently discrimination results from policies and practices that are neutral on their face but

have the <u>effect</u> of discriminating. Those policies and practices must be eliminated unless they are shown to be necessary to the program's operation and there is no less discriminatory alternative.

Under Executive Order 12250, the Department of Justice is responsible for ensuring that funding agencies meet their responsibilities under Title VI. This Department is committed to productive and effective enforcement of the civil rights laws by each agency that extends Federal financial assistance. Facially neutral policies and practices that act as arbitrary and unnecessary barriers to equal opportunity must end. This was the goal of Title VI when it became law and it remains one of the highest priorities of this Administration.

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## THE COLLEGE BOARD REPORTS

## More schools, teachers, and students accepted the AP® challenge in 1998-99

Schools, teachers, and students broke previous records. In 1998-99, 54 percent of the nation's secondary schools enabled 704,298 students in all grades to participate fully in the College Board's demanding Advanced Placement Program® (AP®) by taking one or more AP Exams in May. These 12,886 schools included 60 percent of the nation's public schools and 46 percent of its nonpublic schools. More than 339,000 of these students were seniors who had also taken the SAT; their average SAT scores were 586 on verbal and 594 on math, well above national averages for all graduating seniors.

Who were these AP students? Students who took AP Exams in May 1999 were 55 percent women and 30 percent minority students. Fifty-eight percent were seniors, 34 percent were 11<sup>th</sup> graders, 5 percent 10<sup>th</sup> graders, 2 percent 9<sup>th</sup> graders, and 2 percent in the "other" category.

How well did they do on their AP Examinations? Almost two-thirds of the students achieved grades of 3 or above on AP's 5-point scale – sufficiently high to qualify for credit and/or enrollment in advanced courses at virtually all four-year colleges and universities, including the most selective. This year's average AP exam grade was 3.02.

Educators and governments supported their achievements. This year, some 5,000 dedicated school and college faculty helped develop AP's curriculum and examinations for 32 college-level courses, graded 1.1 million AP Exams, and shared their expertise with 54,000 teachers at more than 2,000 workshops and institutes. In addition, funds from the federal government, 23 states, and the District of Columbia are enabling more schools to introduce students to the rigorous standards of the AP curriculum and examinations. Today, students from many different backgrounds are developing the knowledge and study skills that can give them a head start in college. Last year, the program provided curriculum guides for 32 college-level courses in 18 subject areas.

AP schools generate more student participation every year. This year, each school that has adopted AP's college-level curriculum and examinations had an average of 55 students taking 89 AP Exams. Ten years ago, the averages were 31 students and 53 AP Exams per school.

More students are taking multiple AP Exams. Ten years ago, 32 percent of the students who took AP Examinations sat for two or more of the examinations. This year, that percentage is nearly double: 60 percent of the students took two or more of the examinations.

More AP students are eligible for one or two years of college credit. The number of graduates with five or more AP Exam grades has quadrupled in the past decade, reaching 55,652 this year. These students included 44 with 14 or more AP grades. Almost 1,400 institutions, including the most selective, grant sophomore standing to students who demonstrate competence in three or more AP Exams.

AP students sent their exam grades to 3,007 colleges and universities this year (including the most selective) for credit and placement. This is one-third more colleges than 10 years ago.

AP students do well in college. The College Board regularly sponsors research to verify student success in college and maintain the quality of AP's college-level examinations. Recent research at 21 universities has found that students who place out of introductory courses perform as well as or better than classmates who take those courses at the university. AP students should expect such results, since college faculty supervise the content and standards of AP courses and exams.

# SCHOOL REPORT OF AP EXAMINATIONS (BY STATE)

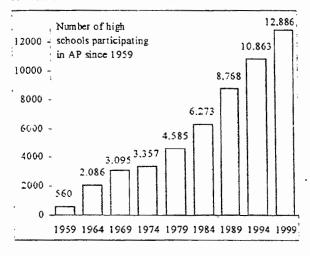
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Elocal a	3	391	416	57.5%	62 7%	22.5	200	266	1	1	17.0%	*2.2	210	ક્ર	- 1	28 47	70.5%	8 8%
Growna	557	332	337	58 5%	605%	20%	£ 14	3 2	1	1	92 7%	¥.8 6	3	~	- 1	61.0%	52.6%	7,0
Hawar	75	\$5	3	73.3%	82 /X	2 2 2	(8)	<b>S</b>	t		48.5%	4 6%	61	اء		40.8%	205%	0 4%
odeshi	149	ઢ	2	42.7%	49 CX	200	3	150	1	1	52 6%	210	20.1	205	1	45.00	17.7%	20%
Ilinois	944	436	8	51.6%	520%	2.80	3	280			75.0.%	۲. ر.	-25	F		2.0 07	42.9%	·\$ 1 9
וואאמו	539	110	8	56.2%	20.00	7,0	372	129	1		34 7%	210	Ç.	٥ :		200	41.9%	7.6%
lines	451	154	2	45.05	33.0%	7.61	346	19	ιı		24 CF.	2	ş.	2 2	ı	46 9%	57 0%	10.1%
Kansas	600	93	5	* 5	1879	4.8%	253	163		- }	2.2.29	XO.	2	2 4		31.7%	33.6%	1.9%
Kentucky	335	হ	S	5000	20.00	%90	325	88			20.3%	7.00	3	9 6	1	33 3%	36.1%	28%
Lousiana	89	~		*0 F3	74. E.3	\$7.5	118	8		. !	77 172	299	6	2 =		\$2.3%	54 7%	24%
Maine	2	8	2	20.4%	74.0%	0.8%	111	162		ı	27.178	× (	200	60		66 2%	26 09	2.7%
Manyand	7.6	23	2	6 CO	92.5%	02%	260	2	( I	ı	119 6%	2	135	20	•	40 6%	44 4%	38%
Massachusells	395	326	326	95 JA	26.5%	24%	6.19	375	l 1	. 1	50 7%	× / ×	5 2	3 2		37 6%	44.0%	72%
Nicterian	730	00.	21.6	70.00	45.3%	22%	305	173	- 1	-1	45.4%	700	26	95		40 4%	37.0%	.34%
Minnrsola	4/3	90	12.	28.2%	36 4%	×01.	249	16	- 1	-1	1	7.6	411	49		39 2%	41.9%	2.7%
Milssissism	\$ 2	2 5	187	27.1%	30 2%	31%	205	221	- 1	1	729 91	10%	26	6.		11.5%	11.5%	000
Missour	5	2	28	32 3%	33.2%	760	173	3	- 1	1	7.61	75.0	¥	93	ı	45 0%	46 3%	40
MORRING	333	76	2	22.7%	22.5%	.0 27k	762	2	ı	1	46 0%	474	20	4	- 1	13.0%	20.62	
Maryda	105	39	5	40.2%	41 93	28.0	: :	9	1	1	64.2%	7.67	36	20	١,	54.1%	33.0%	
New March Paris	112	8	Z	69 OX	25 03.	60%	716	3	1		90.4%	3.4%	161	8		27.2%	46.2%	205
New Jersey	2	406	415	7, 120	87.4%	400	120	S		l	49 2.X	27%	33	و ا		31.679	57.9%	*.
New Mexico	159	69	77	43.9%	40 47	200	RAB.	710	1		79°C0	7,00	=	3	1	226%	31.2%	76%
New York	1,259	945	947	74 6%	4257	200	3 3	295			%6 UU	761	661	ş .		7.000	167%	24%
North Carolina	540	ક્ર	365	45.69	40 /0	1062	Sel	2	1		7.17	×90	2	,		57.6%	532%	.02%
North Dakota	195	2	9	20.	200	13%	702	428	1		63 12	×	201		1	2003	44.1%	.5 9%
Otho	999	829	35	20.00	27. 14	X68	197	106	1 1	1	3003	2 ! 2 !	3 3		1	34 3%	37 1%	28%
Oklahoma	495	2	2	2007	27.89	02%	236	124			2	X	200	2 2	t	406%	45.5%	19%
Oregon	238	2		X5 65	7.19	1.1%	599	450	- 1	- 1	23.2	2 2	15	=		50 5%	%9 <sup>'</sup> 69	13.1%
Pennsykania	ŝ	Ř	5	746%	76 1%	1.5%	**	3.	- 1	NS 0%	2000	200	1	ę	1	33.3%	.79 J%	60%
Shork Island	ءً اٰ ۃ	325	235	700%	71 47	4%	190	ਡ		X0.75	7.0 01	70.1	11	5	1 1	26.3%	35.3%	7.06
South Carolina	C	5	-	19.0%	21 12	21%	111	š	- 1	18.5	7.11.3	1/2	120	5	L	47.7%	53 4%	2 60
South Dayora	5 8	112	217	\$90S	50.2%	26%	290	3	-	. S	A31 874	30.0	261	10,	- 1	39 0%	47.8%	2.2%
Toute	03	606	971	569%	\$7.89	3.8%	8F1-	8 8		15.97	73.87.	, O.Y.	12	=		2,2 0.7	2002	11 0%
den.	7.	98	16	21.6%	69 4%	77.	5	3 2		NG 9%	50 5%	791	35			7.5.7	51 2%	37%
Vermont	95	3	22	69 576	76 876	200	215	257		02 1%	62.7%	0.6%	3	S	- 1	75 50	46 9%	13 4%
Vicenia	478	342	ह	69 5%	20 0	73%	333	661		61 2%	610%	×20.	26	200		7,000	14 0%	1.0%
Washington	425	82	248	7	200	5.9%	151	16	1	£0 69	<b>بر</b> 19	*0 G	7	-	, =	29.5%	24.8%	5.0%
West Vigina	174	66	2	20.03	23.47	×0	00.7	200	315	706%	7.1.7.2	77.	2	;	-	200	11.1%	11.1%
Wisconsin	S9S	35	362	3 8	3 5	1 4%	ķ	23	≈	30.3%	26 6	9	,					
Wyomeng	25	2	2	W 1 67							2000	7(1)	2,609	2,477	2,647	406%	45 6%	20%
	010	11 647	12 229	53.6%	\$60%	22%	16.020	9,77	9,502	2011 11 25							-	
101AL (US)	100.00	3	657															
CHAND TOTAL		12,481	17.806														ó	OVER
SOURCE: Quality Education Data	cation Data																-	. 201140

1920   1920		ITH & 12TH GRADE ENROLLMENT	AP CAN	DIDATES 1999	AP E)	(AMS 1999	11TH & 12TH C 1990	RADENS"	11TH & 12TH GRADEHS 1990-99	1990 - GRAND	1999
Columbs   Colores   Colo		ENROLL MENT	0661	1999	1038	1939	13.51				
Columbia	Alabama Alaska Alizona			1.10	0000	0 7 U	Ξ	į≅	-5	37.3%	57.5%
Columbia   17,242   19,259   17,550   16,140   16,140   17,252   17,550	Alizona	97,093	6,045	2666	0,502	2 642	057	1715	5-	%9 €9	67.9%
Column	Arizona	17,304	1,449	1,430	10 440	11 325	107	150	0-	63.0%	61.7%
Columbia   17,220   17,221   12,221   12,221   12,221   12,222   12,221   12,222		106,338	0,034	2020	181	6.116	62	11/4	+10	52.0%	52.2%
Column	Alkalisas	64,851	2,770	0,000	175 182	503 523	221	756	+17	65.7%	b4.2%
Trigger   Trig	Catilornia	700,243	0.00	505.01	13.757	16.040	147	158	+11	66.3%	64.9%
1,123.2   1,135.2   1,135.3   2,039   2,039   1,135	Colorado	93,998	9,207	11 091	16 164	18,645	2118	233	+15	72.1%	72.3%
Columbo   20,000   1713   1713   1714   1714   1720   1720   1715   1714   1714   1720   1715   1714   17	Connecticul .	13,146	1 976	1 999	3 073	3,405	176	182	9+	77.7%	12.0%
Columnes   Coling	Delaware	1,2,11	1713	1 799	3.038	3,233	359	368	+29	73.4%	67.1.70
Chicope   Chic	District of Columbra	201,06	17.034	40.706	62,955	70,346	215	226	+11	50.276	50 69
1,000	Florida	000,002	16 416	10.574	25,365	29,911	144	169	+25	60.3%	30.079
1,2,2,10   2,5,54   1,5,55	Georgia	00,000	2006	3 040	4.618	5,056	157	164	/+	67.2%	63.7%
1,1,2,2,10   2,1,2,2   2,1,2,10   2,1,2,2   2,1,2,10   2,1,2,2	Наман	23,743	1 236	1 985	2.546	2,941	/9	11	+10	50.1%	71 097
Column	ldaho	37,344	966 46	26.740	41.904	46,160	144	144	0.	72.3%	0,1070
History	Illinois	232,213	0.500	0 674	13.044	14.488	91	96	+7	50.2%	50.8%
Big	Indiana	047,240	07.4.5	7650	4 874	5.241	52	S	+5	70.0%	03.02
Colored   Colo	lowa	65,555	3,470	2,035	2 842	4 253	51	S	+5	64 6%	63.6%
Hard	Kansas	66,085	2.733	3,102	0.510	10.203	96	112	+14	20 7%	50.4%
10,001   1,000   1,0	Kenlucky	86,874	0.602	0000	4 762	5 039	42	46	44	63 8%	63.9%
1,12,539   1,173   1,746   1,755,47   1,740   1,170   1,120   1,170	Louisiana	110,001	3,114	2.53	3 788	4.463	118	137	61+	67.4%	07.7%
13,359	Maine	30,55	0,0,2	17 746	25.542	28.962	216	234	+18	71.5%	71.0%
122,245   123,245   123,456   123,457   123,	Maryland	112,559	10,112	05/1/1	20,02	32,350	213	230	+17	72 0%	714%
120,072	Massachusells	133,336	10,034	07701	26,940	20 105	112	122	01.	65 3%	65.5%
C   C   C   C   C   C   C   C   C   C	Michigan	229,833	17.71	0/4/61	16 151	17,070	105	123	•18	58 6%	61.4%
127.752	Minnesota	126,072	1036	6706	3.830	4,331	95	65	4.7	45.5%	40.3%
1,000	Mississippi	62,699	166,2	5,007	7 745	0.775	99	64	8+	74.6%	73.5%
157.555   1.702   1.511   2.448   2.255   6.00   45   5.5   5.00     20.005   2.700   3.144   4.715   4.515   5.000   110   127   4.9   70.64%     30.005   2.700   3.144   4.715   4.515   4.515   7.05   7.05     30.005   2.700   3.144   4.715   4.515   4.515   7.05   7.05     30.005   2.700   3.144   4.715   4.515   7.05   7.05     30.005   2.700   3.144   4.715   4.515   7.05   7.05     30.005   2.700   3.144   4.715   4.515   7.05   7.05     30.005   2.700   3.144   4.715   4.515   7.05     30.005   2.700   3.022   3.701   4.05   7.05     30.005   2.700   3.022   3.701   3.020   3.02     30.005   3.701   3.020   3.701   3.020   3.02     30.005   3.701   3.701   3.020   3.02   3.02     30.005   3.701   3.020   3.022   3.02   3.02     30.005   3.701   3.020   3.022   3.02   3.02     30.005   3.701   3.020   3.022   3.02   3.02     30.005   3.701   3.020   3.022   3.02   3.02     30.005   3.701   3.020   3.022   3.02   3.02     30.005   3.702   3.702   3.022   3.022   3.02   3.02     30.005   3.702   3.702   3.022   3.022   3.02     30.005   3.702   3.702   3.022   3.022   3.022   3.02     30.005   3.702   3.022   3.022   3.022   3.02   3.02     30.005   3.702   3.002   3.002   3.002   3.002   3.002   3.002   3.002   3.002   3.002   3.002   3.002   3.002     30.005   3.005   3.005   3.002	Missouri	267,127	911.1	1.528	1,056	2,170	7.2	85	• 10	66 9%	72.0%
Spirite   39,424   2,568   2,921   4,359   5,000   110   124   4,0   70,48     Spirite   30,005   2,1,400   23,614   4,325   210   245   4,55   70,68     Spirite   30,005   2,1,400   23,614   4,159   245   4,55   245   4,55     Spirite   30,005   2,1,400   23,614   4,169   110   112   4,2   24,0   24,014     Spirite   34,239   17,537   20,170   26,074   24,169   110   112   4,2   25,00     Spirite   34,239   17,537   20,170   26,074   24,169   110   112   4,2   25,00     Spirite   34,239   2,005   2,005   2,005   2,005   2,005     Spirite   3,005   2,005   2,005   2,005   2,005   2,005     Spirite   3,005   2,005   2,005   2,005   2,005   2,005     Spirite   3,005   3,005   2,005   2,005   2,005     Spirite   3,005   3,005   3,005   2,005   2,005     Spirite   3,005   3,005   3,005   3,005   3,005     Spirite   3,005   3,005   3,005   3,005   3,005     Spirite   3,005   3,005   3,005   3,005   3,005     Spirite   3,005   3,005   3,005   3,005   3,005   3,005   3,005     Spirite   3,005   3,005   3,005   3,005   3,005   3,005   3,005     Spirite   3,005   3,005	Montana	50.02	1,762	1.611	2,448	2,235	99	45	ů,	02.1%	57.6%
10,005	Nebraska	39 424	2.568	2,921	4,359	5.000	118	124	9+	36 0%	68.0%
157.569	New Homospie	30.005	2,790	3,114	4,172	4,577	130	14/	£+	70.5%	70.3%
August   A	New Harry State	157,569	21,430	23,866	35,780	40,828	210	505 107	56.	56 1%	55.6%
1976   1970   20,710   20,751   14,259   20,10   21,00   21,00   21,00   21,00   4.29   59.5%     1930	New Mexico	42,348	2,640	3,072	3,791	4,683	1111	574	*50	64 1%	64.4%
149,239   17,507   20,170   28,074   34,199   120   112   43   72,178   17,902   20,170   28,074   34,199   17,090   112   49   55,5%   12,090   26,058   21,056   25,010   26,023   21,050   21,074   21,090   22,003   24,022   20,058   21,050   25,004   21,050   25,004   21,050   25,004   21,050   25,004   21,050   20,011   21,011	Not York	376,671	65,972	70,201	105,751	114,259	007	210	+29	59.9%	26 6%
19.902   529   597   703   7	North Carolina	149,239	17,597	20,170	28,074	34,109	361	4	+3	72.1%	71.8%
216,046   20,058   21,056   30,774   31,774   75   77   933   422   58,6%     64,159	North Dakota	19,982	529	597	163	620	101	611	6+	65.5%	64.9%
B4,159	Ohio	276,046	20,058	21,056	30,274	0.3,67.6	71	93	+22	28.8%	58 2%
18,947	Oklahoma	84,159	4,502	9,616	0.303	306,9	75	11	•2	67.1%	68.5%
17.70   17.7	Oregon	78,947	4,396	4,533	031.0 031.0	39 224	116	131	+15	65.7%	65.5%
12,726	Pennsylvania	277,096	22,003	2001	2007	3,177	131	140	6+	69 4%	69.0%
12,778	Ahode Island	21,18/	000,1	10.549	16,369	16,003	101	193	+5	55.1%	50.0%
112,778	South Carolina	22.241	1,0116	1,100	1,536	1,63,1	00	72	64	55 5%	64 8%
Terrican	South Dakota	112.778	11,445	9,000	12,032	14,376	104		11+	57.1%	56 2%
75,450         11,116         12/105         10,112         7.11         7.12         7.19         64.5%           16,719         1,719         1,710         1	Bunessee	469 006	41,043	חנק,דה	74,102	111,405	141)	11/1	671	67 6%	68.8%
16,719 1,419 1,711 26,725 249 305 459 65 6% 10,120 12,370 14,001 249 305 11,007 2,101 3,224 3,305 66 7,2 46 6,32% 10,120 12,370 14,001 11,007 12,520 17,751 15,146 11,7 12,6 41 41,0 12,330 11,1007 12,550 17,751 15,146 11,7 12,6 41 41,0 12,330 11,007 12,550 17,751 15,146 11,0 12,345 354 497 47, 693 31 44 41,0 12,345 354 497 47, 693 31,0 16,5 11,1007 12,5 41,0 12,5 4	(Val)	75,450	2	12,026	10,790	10 132	161	1291	61 +	64 5%	65.7%
149,766   23,214   28,104   319,749   43,005   66   77   41   68,4%   68,4%   69,4%	Vermont	16,719	694	1,708)	1771	2,200	(1)00	200	+53	65 6%	63.3%
149,061   1,722   19,120   1,540   1,500   10   172   46   55.2%   14,000   14,000   14,000   14,000   14,000   14,000   14,000   14,000   14,000   14,000   14,000   14,000   15,345   354   497   477   693   31   44   415   64,1%   65,21,237   618,257   618,257   635,501   991,952   1,122,414   15,0   165   4,15   64,1%   16,911   10,317   24,705   27,101   65,211,237   635,100   704,290   1,016,657   1,149,515   1,149,515   64,4%	Virginia	149,766	23,214	20,047	976,915	100,00	611	0.0	+11	68.4%	%6.99
44,847 2,212 2,123 3,544 1,556 11,751 15,146 117 125,5 40 60.3% 143,938 11,607 12,556 17,751 15,146 117 12,545 40 60.3% 15,345 354 407 477 693 31 44 413 63.7% 63.7% 63.27,237 616,257 605,501 991,952 1,122,414 15,0 165 415 64.1% 16,911 10,317 24,705 27,101 64.4% 64.4% 14,651 1,016,657 1,149,515 64.4%	Washington	149,061	n.722	10,120	12,370	5066	99	7.7	9+	55 2%	55.7%
143,938 1,104 12,536 437 693 31 44 +13 63.7% 53.7% 15,345 354 407 403 15,345 15,345 415 64.1% 15,345 6,271,237 616,257 605,501 991,952 1,122,414 15,0 165 +15 64.1% 74.4% 16,911 10,317 24,705 27,101 64.4% 6,271,237 635,160 704,290 1,016,657 1,149,515 64.4%	West Virginia	44,847	2,212	2,133	17 751	19.146	(11)	125	0+	60 3%	68.5%
13,453 534 505,901 991,952 1,122,414 150 165 +15 64,1% 6271,237 618,257 605,901 991,952 1,122,414 150 165 +15 64,1% 74,4% 16,911 18,317 24,705 27,101 64,4% 64,4% 17,149,515 625,160 704,290 1,016,657 1,149,515	Wisconsin	143,938	70071	700	477	693	31	44	+13	63.7%	20.02
6,271,237 618,257 605,901 991,952 1,122,414 130 16,911 10,317 24,705 27,101 64,701 64,4% 627,1,237 635,160 704,290 1,016,657 1,149,515	Wyoming	13,343	700			***	031	165	+15	64.1%	63 5%
6,271,237 635,160 704,290 1,016,657 1,149,515	TOTAL (U.S.)	6,271,237	618,257	605,981	991,952	1,122,414				74.4%	74.8%
6,271,237 003,100 0.2,173,6	NON US/US, TERRICAN		16,911	10,317	1 016 657	1 149 515				64.4%	63 8%
	GRAND TOTAL	6,271,237	033,10	003,907	33,313,1						

## Chart 3: More schools and colleges benefit from Advanced Placement every year

In 1999, a record 12,886 secondary schools administered AP Exams...



...and students sent their exam grades to a record 3,007 colleges and universities.

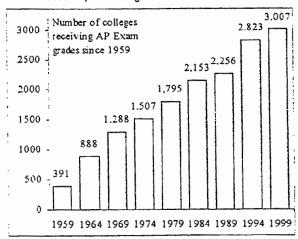
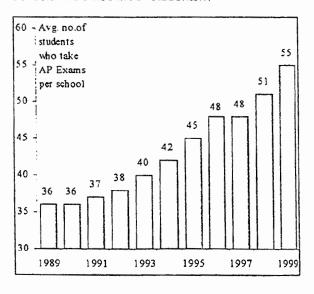


Chart 4: Schools see more students pursuing the full benefits of Advanced Placement every year

Schools see a rise in AP students...



...and exams.

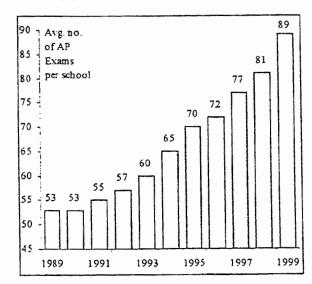


Table 5: Minority students were 30 percent of students who took college-level AP Exams in May 1999

American Indian, Alaskan Native	3,136
Asian, Asian Amer., Pacific Islander	75,875
African American/Black	31,023
Mexican American	32,605
Puerto Rican	4,608
Hispanic/Latino	25,640
White	445,880
Other	21,770
Not stated	45,544
Male	305,501
Female	380,480
Total students	685,981
Percent minority	30%

Table 6: Federal government, 23 states, D.C. support AP standards

	Year	Annual	
State	begun	amount	Type of support
Arizona			Grants for minority students, and professional development.
Arkansas	1995	\$375,000	Professional development, supplies, fees of low-income students.
California	1998	\$2,000,000	Pays fee for students at 200% of poverty rate. Mandates college acceptance and funds professional development.
Colorado	1996		Reimburses students who receive credit through AP by tuition reductions.
D.C.	1989		Exam fees, professional development.
Florida	1984	\$11,000,000	Up to each district, but 85% must be used for AP professional development, fees, and supplies. 30 large districts pay the fee.
Georgia	1992	\$1,600,000	Pays exam fees.
Indiana	1991	\$650,000	Exam fees for math, science, English language. Mandates at least two AP courses in all public schools. Professional development. Has AP Advisory Council.
Kentucky	1985	\$265,000	Special diploma with fee reimbursement.
Minnesota	1992	\$1,875.000	Pays for exam fees (public and nonpublic), professional development, and AP Scholarships. Publishes college AP policies. Has AP Advisory Council.
New Mexico	1994	\$350,000	Fees for minority and low-income students, professional development, vertical teaming, supplies.
Oklahoma	1996	\$2,000,000	Professional development, supplies, school incentives.
South Carolina	1983	\$1,500,000	Pays fees for juniors and seniors; mandates and pays for summer institutes for new teachers; mandates school participation and college acceptance, and students must take exams.
Texas	1993	\$10,500,000	Pays \$25 toward fee for low-income students and extensive professional development. Will mandate AP.
Wisconsin	1993		Mandates college acceptance and payment of exam fees for low-income students. AP Advisory Council.
Federal grants	1998-9 1999-(	99 \$2.700.000 00 \$4.000,000	Grants to 34 states pay exam fees for low-income students after College Board fee reduction. For states in which low-income students pay a nominal amount, the new grants may include actions that increase the participation of those students.

## Nine states support AP standards in other ways

Maine		indui do in o circ	······································
Maine	1987		Gifted and Talented Office reimburses AP expenses in low-
			income districts.
Massachusetts	1996	\$500,000	Funds all professional development and materials; AP Advisory
			Council.
Michigan	1999	\$30,000	AP via distance learning for 100 students. Publishes college policies.
Mississippi	1991		Gifted and Talented Office funds professional development.
Missouri	1993	\$389,000	Funds two AP centers and professional development, and
			publishes college policies. Pays AP fees for students with high
			scores on a local exam.
North Carolina	1994		
			Mandates weighted grades and publishes college policies.
Utah	1985	\$450,000	Grants to schools for supplies, professional development, other
			AP costs.
Virginia	1993		Requires every high school to offer two AP courses, offers
			special diploma.
West Virginia	1988	\$190,000	AP Advisory Councils, AP Center, professional development;
TOST TIEMBA	1700	\$1,70,000	
			mandates college acceptance, publishes college policies.



Overview (Public and Private Schools)

			Sta	ıte					National	onal		
	Number of	Number of Candidates	Number of	f Exams	Number of Grades 3-5	Grades 3-5	Number of Candidates	Candidates	Number of Exams	f Exams	Number of Grades 3-5	Frades 3-5
	Number	% Change from previous year	Number	% Change from previous year	Number	% Change from previous year	Number	% Change from previous year	Number	% Change from previous year	Number	% Change from previous year
Total 1	119,358	13.8%	119.358	16.2%	130,611	3.5%	685,981	ધું	1,122,414	11.0% 1,122,414 5 7 13,2%	712,903	.12.1%
<i>Gender</i> Male Female	52.058 67,300	13.8%	52.058	16.2%	69,052	13.5%	380,480	10.9%	601,569	13.0%	346,645	12.8%
Etlutic Group American Indian	1. 632.	12:1%;	130 632 834721188 33 7 9761	(F) 18.3%	516	11.4%	3,136		13.6% % 4.695	17.2%	2,329	14.2%
Asian	29,754	12.0%	57,319			11.4%	75,875	11.4%	145,654	14.1%	94,715	11.9%
Biack	3,146	23.2%	3.146	24.9%	1,815	:14.2%	31,023	14.7%	45,725	17.7%	15,814	15.8%
All Hispanic	25,117_	18.6%	36,232	22.2%	22,260			•	93,079	20.9%	53,400	16.5%
Mexican American		19.0%	17,813	22.4%	15,263	17.4%	32,605	20.6%	47 708	24.9%	25,199	17.3%
Puerto Rican	291	17.3%	465	20.2%	289		4,609	12.7%	959'9	13.9%	3,701	12.7%
Other Hispanic	7,013	17.5%	7,013	21.9%	6.708	16.7%	25,640	13.9%	38.715	17.6%	24,500	16.4%
White	45,653 ×	13.9%	78,485	16.4%	53,679	15.5%	445,880	10.5%	721,839	12.6%	472,016	12.6%
Other	996.9	6,3681 (3,113,6%)	11,399	3-1	7.194	F16.5% \\ 7.1940 \\ 13.6%	21,670	17.1%	37,267	20.1%	23,547	18.9%
No Response	8,688	4.1%			9,814	7.9%	45,544	2.0%	74,155	2.5%	51,082	%6:0

	E . 1	1
National	% Change from previous year	16.4% 13.3% 13.2% 18.2%
Nafi	Number	7.165,018, 235,545 7.312,340, 271,495
ite	% Change from previous year	(5.32,422)     (5.16,1%)     (165,018)     (164%)       43,284     (14.7%)     (235,545)     (13.3%)       (5.4905)     (11,1%)     (131,340)     (19.1%)       47,559     (18.2%)     (27,7%)     (138,016)     (18.9%)
State	Number	732,422 43,284 73,54,905 47,559

AP Grades

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Overview (Public Schools)

			Stat	fe					Nationa	nal		
	Number of Candidates	Candidates	Number of Exams	f Exams	Number of Grades 3-5	rades 3-5	Number of Candidates	Candidates	Number of Exams	f Exams	Number of Grades 3-5	Grades 3-5
	Number	% Change from previous year	Number	% Change from previous year	Number	% Change from previous year	Number	% Change from previous year	Number	% Change from previous year	Number	% Change from previous year
Total .	100,966	15.1%	15.1% [177,233]	17.8%	107,076	14.7%	568,021	11.4%	11.4% 923,039	13.8%	571,499	12.5%
<i>Gender</i> Male Female	4.743.6383 57,330	57,330 15.2% 93,911	93,911	17.9%	56,963	14.8%	249,026 318,995	11.3%	501,304	14.1%	275,046 296,453	13.4%
American Indian  Asian  Asian  Asian  Black  All Hispanic  Puerto Rican  Other Hispanic  24.1  24.1  77.6  832.  60.774  50.36  80.774  80.774  80.774  80.774  80.774  80.776  80.774  80.774  80.776  80.776  80.776  90.776  90.776  90.776  10.008	26.363 22.372 22.372 22.372 24.1 24.1 37.099 37.099 37.099 6.875	12.6% 12.6% 20.3% 17.6% 15.0% 15.0% 5.0%	12.6% 50,774 12.6% 50,774 20.3% 32,149 20.3% 87,22,973 17.6% 87,86 15.0% 63,356 15.0% 63,356 5.0% 11,008	16.5% 15.2% 24.5% 24.3% 24.9% 18.0% 6.1%	30,83 30,83 30,83 19,38 19,38 2,28 42,28 7,28	62% 3 11.6% 03 7.18.6% 18.9% 11.20.3% 12. 18.7% 15. 18.7% 17.1% 17.1% 17.1% 17.1% 17.1% 17.1% 17.1% 17.1% 17.1% 17.1% 17.1% 17.1% 17.1% 17.1%	64,908 64,908 64,748 54,748 3,775 3,775 365,799 365,799 365,799	12.1% 12.1% 19.0% 12.0% 12.8% 10.4% 10.4% 3.5%	124,670 124,670 124,670 16,39,931 15,466 5,466 32,025 587,655 587,655 587,655	16.2% 19.2% 23.0% 26.7% 15.0% 12.6% 3.9%	79.785 79.785 44.938 22,300 2,967 7,19,671, 376,632 37,657	9.3% 12.6% 18.2% 18.6% 14.1% 12.5% 20.9%

% Change from Number         % Change from Number         % Change from Provious year           Number         previous year         Number         provious year           35,274         16.0%         187,356         13.7%           45,907         20.0%         230,878         13.8%           41,244         20.0%         230,878         13.8%           20,0%         230,878         20.2%		State	ite	National	onai
Number previous year Numbor provious yea 25.8955 274 16.0% 187.356 13.7% 35.274 20.0% 230,878 13.8% 20.2% 35.279 20.2% 35.279 20.2% 35.279 20.2%	L		% Change from		% Chango from
25.8955		Number	previous year	Numbar	provious year
35,274 16.0% 187,356 13.7% 35,256,965 19.0% 13.2% 25,965 19.0% 13.8% 230,878 13.8% 13.8% 20.0% 230,878 13.8% 20.2%	Щ				
35,274 16.0% 187,356 13.7% 45,907% 20.0% 230,878 13.8% 13.8% 13.8% 13.8% 13.8%		3. 25.895°	WEX17.5%	128,178	17.0%
35,274 16.0% 187,356 13.7% 45,9075 20.0% 230,878 13.8% 13.8% 20.0% 230,878 13.8% 20.2% 35,25,662 20.2%	÷	The same of the same	WELL WOLLD A LEAD SOLD	dillar and desired to	
41,244 20.0% 31256,965 13.8% 13.8% 230,878 13.8% 13.8%	_	35,274	16.0%	187,356	13.7%
41,244 20.0% 230,878 13.8% 13.8% 20.2% 31.20,662 20.2%		STATE OF THE PARTY	CACO CANADAN	130 55 OSE	, %9 O
41,244 20.0% 230,878 13.8% (35.55.5913.20.2%) [\$\frac{1}{3}1	_::	40'AU	17.7	1000 CO	
130555 613   N. 30 2%   Fr 120,662   1 20.2%		41,244	20.0%	230,878	13.8%
		30.55 613	N. 30 2%	Fr 120,662	20.2%

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AP Grades

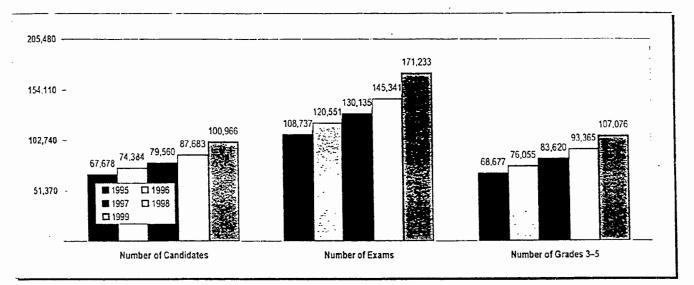
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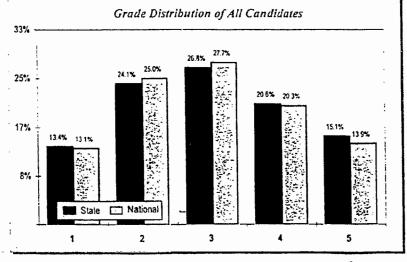


## **Public Schools**

All Candidates



	Candid	ates		Exa	ms	
	Tota	el l	Tota	al .	Grades	3–5
	State	National	State	National	State	National
1995	67,678	407,030	108,737	628,393	68,677	380,365
1996	74,384	432,751	120,551	673,775	76,055	417,871
% Change from 1995	9.9%	6.3%	10.9%	7.2%	10.7%	9.9%
1997	79,560	467,133	130,135	734,590	83,620	462,062
% Change from 1996	7.0%	7.9%	8.0%	9.0%	9.9%	10.6%
1998	87,683	509,895	145,341	811,239	93,365	507,897
% Change from 1997	10.2% .	9.2%	11.7%	10.4%	11.7%	9.9%
1999	100,966	568,021	171,233	923,039	107,076	571,499
% Change from 1998	15.1% ·	11.4%	17.8%	13.8%	14.7%	12.5%
% Change from 1995	49.2%	39.6%	57.5%	46.9%	55.9% ;	50.3%



	Gı	ade Disti	ribution	
	Numb	er	%	
	State	National	State	National
5	25,895	128,178	15.1%	13.9%
4	35,274	187,356	20.6%	20.3%
3	45,907	255,965	26.8%	27.7%
2	41,244	230,878	24.1%	25.0%
1	22,913	120,662	13.4%	13.1%



# 1999 California AP Report Public Schools

All Candidates

	Numbe	ıher		Grad	Grade Distribution (%)	(%)	
Exams	Candidates	Grades 3-5	sv.	ম	3	2	
Ап: History of	1,768	1,251	10.9%	25.6%	34.3%	15.2%	14.0%
Ап: Studio-General Portfolio	066	576	10.4%	17.6%	30.2%	33.4%	8.4%
Aft: Studio-Drawing Portfolio	00)	268	10.3%	22.3%	34.5%	26.5%	6.5%
Biology	11,343	7,481	21.1%	22.0%	22.8%	20.8%	13.2%
Chemistry	6,005	3,260	15.5%	13.5%	24.4%	23.3%	23.2%
Computer Science A	1,690	1,028	18.1%	24.7%	18.0%	10.8%	28.4%
Computer Science AB	803	3.00	31.4%	15.6%	27.7%	,%8.6	15.9%
Economics: Macroeconomics	3,904	2,248	12.6%	28.0%	17.0%	27.5%	14.9%
Economics: Microeconomics	3,101	1,879	12.5%	26.2%	21.8%	22.8%	16.6%
English Language and Composition	12,631	7,245	7.4%	16.2%	33.7%	36.8%	5.8%
English Literature and Composition	22,100	13,959	%2.6.	19.6%	33.8%	29.5%	7.4%
Environmental Science	1,460	782	1	1	1	1	ı
French Language	1,862	616	11.1%	%6.6	28.4%	26.5%	24.2%
French Literature, (Carlos and Carlos and Ca	14.	19/30	28.4%	37.8%	16.2%	10.8%	%8.9
German Language	410	241	20.5%	16.1%	22.2%	30.7%	10.5%
Government and Politics: Comparative	666	579		12.8%	31.0%		17.5%
Government and Politics. United States 3	711,11	7,072	%9'8 <sub>100</sub>	18.6%	33.1%	26.8%	12.8%
History: European	7,888	5,013	8.7%	18.2%	36.7%	%6.61	%9.91
History: United States	24,945	11,807	8.7%	18.3%	20.3%	36.1%	16.6%
International English Language			Section 1		1.3		
Latin: Vergil	135	94	28.9%	22.2%	18.5%	17.8%	12.6%
Latin Literature	43	13	7.0%	7.0%	16.3%	2.3%	67.4%
Mathematics, Calculus AB	16,013	10,430		22.8%	25.7%	18.4%	16.5%
Mathematics: Calculus BC	4,038	3,105	36.5%	.18.3%	. 22.1%	9.3%	13.8%
Music: Theory	466	388	23.8%	27.1%	76.9%	18.2%	4.0%
Physics B	4,045	2,275	10.1%	16.2%	29.6%	17.1%	720.1%
Physics C: Mechanics	2,066	1,284	%1.91	22.4%	., 23.7%	%8.91	21.1%
Physics C: Electricity and Magnetism	707	426		21.8%	. 17.1%	22.3%	17.4%
Psychology	2,730	1,769	18.5%	23.8%	22.6%	21.0%	14.2%
Spanish Language	19,060	16,186	36.1%	28.2%	20.6%	10.2%	4.9%
Spanish Literature ?!	3,286	2,361	%1.9	22.1%	43.6%	20.3%	7.9%
Statistics	4,431	2,480	8.7%	20.2%	27 1%	21.3%	22.7%

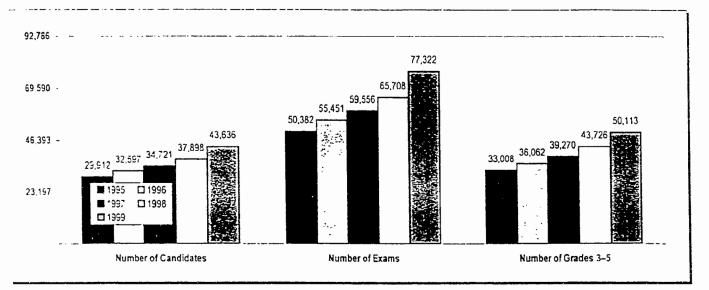
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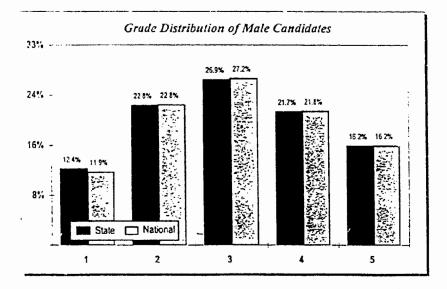
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## Public Schools Male Candidates



	Candid	ates		Exa	ms	
	Tota	ı	Tota	1	Grade	s 3–5
	State	National	State	National	State	National
1995	29,912	180,375	50,382	289,924	33,008	184,933
1996	32,597	191,086	55,451 <sup>1</sup>	310,497	36,062	202,315
% Change from 1995	9.0%	5.9%	10.1%	7.1%	9.3%	9.4%
1997	34,721	205,413	59,556	336,961	39,270	221,583
% Change from 1996	6.5%	7.5%	7.4%	8.5%	8.9%	9.5%
1998	37,898	223,386	65,708	369,593	43,726	242,488
% Change from 1997	9.2%	8.7%	10.3%	9.7%	11.3%	9.4%
1999	43,636	249,026	77,322 ;	421,735	50,113	275,046
% Change from 1998	15.1%	11.5%	17.7%	14.1%	14.6%	13.4%
% Change from 1995	45.9%	38.1%	53.5%	45.5%	51.8%	48.7%



	6	irade Disti	ribution	
	Nurr	ber	9	6
	State	National	State	National
5	12,497	68,458	16.2%	16.2%
4	16,780	91,936	21.7%	21.8%
3	20,836	114,652	26.9%	27.2%
2	17,593	96,331	22.8%	22.8%
1	9,616	50,358	12.4%	11.9%



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# 1999 California AP Report Public Schools

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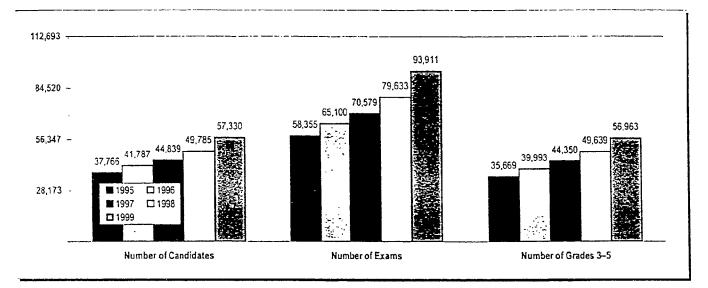
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	Numbe	ıber		Grad	Grade Distribution	(%)	
Exams	Candidates	Grades 3-5	S	4	3	2	_
Art: History of	1 289	474	6.6%	23.3%	35.8%	16.7%	14.3%
Art: Studio-General Portfolio	393	223	%6.6	15.8%	31.0%	35.9%	7.4%
Art: Studio-Drawing Portfolio	184	131	10.3%	22.8%	38.0%	23.9%	4.9%
Biology	681,5	3,723	25.3%	23.7%	22.8%	18.1%	
Chemistry of the form of the first of the fi	3,419	2,018	18.4%	15.0%	25.6%	21.1%	19.8%
Computer Science A	1,368	844		25.2%	17.8%	10.2%	.28.1%
Computer Science AB	722	237	(32.1%	15.5%	26.7%	10.1%	. 15.5%
Economics: Macroeconomics	2,025	1,277	14.9%	30.6%	17.6%	25.6%	11.3%
Economics: Microeconomics	1,640	1,051	15.0%	27.9%	21.2%	21.7%	14.2%
English Language and Composition	4,790	2,774	%0.8	,16.8%	., 33.2%	36.3%	. 5.8%
English Literature and Composition Targette	8,207	151,5	%06	, %9.61	34.1%	29.8%	7.4%
Environmental Science	641	401		ı	i	1	1
French Language 1877	583	288	.,13.0%	9.3%	27.1%	26.4%	24.2%
French Literature	. 28	61		32.1%		17.9%	14.3%
German Language	183	92	14.2%	13.7%	22.4%	37.2%	12.6%
Government and Politics: Comparative	230	335	15.3%	14.3%	33.6%	21.9%	14.9%
Government and Politics: United States	5,369	3,548	) . ) .	21.5%	34.5%	24.0%	9.6%
History: European	3,661	2,490		20.2%	37.2%	18.3%	13.7%
History: United States	11,327	5,867	10.2%	20.5%	21.2%	34.9%	13.3%
International English Language				60			
Latin: Vergil	67	47	22.4%	17.9%	29.9%	11.9%	17.9%
Latin Literature	30	7	ı	%1.9	16.7%	3.3%	73.3%
Mathematics: Calculus AB	8,415	5,755	19.0%	24.0%	25.3%		14.6%
Mathematics: Calculus BC 19	2,404	1,913		18.9%	120.1%	8.4%	12.0%
Music: Theory	274	206	28.1%	23.4%	23.7%	19.7%	81.8
Physics B	2,563	1,574	.12.5%	17.9%	31.0%	16.0%	22.6%
Physics C.; Mechanics	1,352	-	19.5%	25.1%	.23.6%	15.2%	16.5%
Physics C. Electricity and Magnetism		. 313.	24.8%	. 22.4%	12.9%	21.0%	15.9%
	924	622	21.3%	24.9%	21.1%	19.4%	13.3%
Spanish Language	6,603	5,458	30.3%	28.8%	23.5%	11.4%	%0.9
	1,010	1 392	4.4%	22.3%	28.3%	22.7%	12.0%

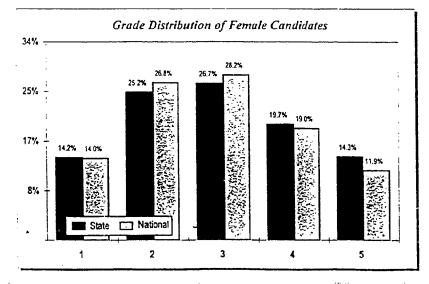


## **Public Schools**

## Female Candidates



	Candid	lates		Exa	ms	
	Tota	ıl	Tot	al	Grades	<b>3-</b> 5
	State	National	State	National	State	National
1995	37,766	226,655	58,355	338,469	35,669	195,432
1996	41,787	241,665	65,100	363,278	39,993	215,556
% Change from 1995	10.6%	6.6%	11.6%	7.3%	12.1%	10.3%
1997	44,839	261,720	70,579	397,629	44,350	240,479
% Change from 1996	7.3%	8.3%	8.4%	9.5%	10.9%	11.6%
1998	49,785	286,509	79,633	441,646	49,639	265,409
% Change from 1997	11.0%	9.5%	12.8%	11.1%	11.9%	10.4%
1999	57,330	318,995	93,911	501,304	56,963	296,453
% Change from 1998	15.2%	11.3%	17.9%	13.5%	14.8%	11.7%
% Change from 1995	51.8%	40.7%	60.9%	48.1%	59.7%	51.7%



	G	rade Distr	ibution	
	Num	ber	•	6
	State	National	State	National
5	13,398	59,720	14.3%	11.9%
4	18,494	95,420	19.7%	19.0%
3	25,071	141,313	26.7%	28.2%
2	23,651	134,547	25.2%	26.8%
1	13,297	70,304	14.2%	14.0%



## 1999 California AP Report Public Schools

rubiic Schools
Female Candidates

	Numbe	uber		Grad	Grade Distribution (%)	(%)	
Exams	Candidates	Grades 3-5	S	4	٣	2	-
Art: History of	1,081	777	11.5%	27.0%	33.4%	14.2%	13.9%
Art: Studio-General Portfolio	597	353	10.7%	18.8%	29.6%	31.8%	%0.6
Art: Studio-Drawing Portfolio	216	137	10.2%	21.8%	31.5%	28.7%	7.9%
Biology	6,154	3,758	17.7%	20.7%	22.7%	23.1%	15.8%
	2,676	1,242		11.7%	22.9%	26.0%	27.6%
Computer Science A	322	184	15.5%	22.7%	18.9%	13.0%	. 29.8%
	81	59	24.7%	16.0%	32.1%	7.4%	%8.61
Economics: Macroeconomics	1,879	126	10.2%	25.2%	16.3%	29.5%	18.8%
Economics: Microeconomics	1,461	828	9.7%	24.4%	22.6%	24.0%	19.4%
English Language and Composition	7,841	4,471		15.8%	34.1%	37.2%	5.8%
English Literature and Composition	13,893	808'8	10.2%	19.6%	33.6%	29.3%	7.3%
Environmental Science	819	381	ı	ı	1	)	1
French Language	1,279	63.1		. 10.2%	28.9%	26.5%.	24.2%
French Literature	946	42	30.4%	41.3%	19,6%	6.5%	2.2%
German Language	227	149	25.6%	18.1%	22.0%	25.6%	8.8%
Government and Politics. Comparative	469	244	12.8%	11.1%	28.1%		20.5%
Government and Politics: United States 2015	6,348	3,524	7.3%	16.2%	32.0%	29.2%	15.2%
History: European	4,227	2,523	7.0%	16.4%	36.3%	21.2%	19.1%
History: United States	13,618	5,940	%9′.	16.5%	19.5%	37.0%	19.3%
International English Language		A STATE OF THE STA				13	
Latin: Vergil	89	47	35.3%	26.5%	7.4%	23.5%	7.4%
Latin Literature	13	9	23.1%	7.7%	15.4%	1	53.8%
Mathematics: Calculus AB	7,598	4,675.		21.5%;	26.0%	19.8%	18.6%
Mathematics: Calculus BC 17	1,634	1,192	30.5%	17.4%	25.0%	%9.01	16.5%
Music: Theory	225	182	18.7%	31.6%	30.7%	16.4%	2.7%
Physics B	1,482	101	%0.9	13.2%	28.1%	%0.61	33.7%
Physics C: Mechanics	714	361	0.7%	17.1%	23.8%	19.7%	29.7%
Physics C. Electricity and Magnetism	211	113	.13.3%	20.7%	%6.61	. 25.6%	20.9%
Psychology	1,806	1,147	17.0%	23.2%	23.3%	21.8%	14.7%
Spanish Language	. 12,457	10,728	39.2%	27.9%	. 19.0%	9.5%	4.4%
Spanish Literature 18 18 18 18 18 18 18 18 18 18 18 18 18	2,276	1,701	%6.9	23.4%	44.4%	.19.2%	%0.9
Statistics	2,193	1,088	2.8%	%0'81	25.8%	22.6%	27.8%

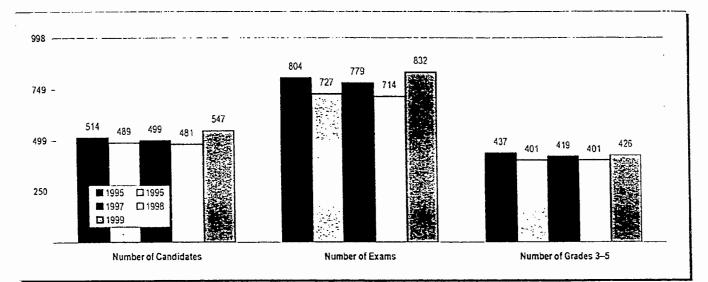
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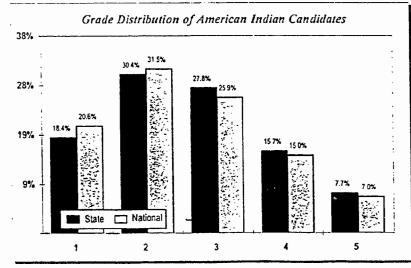


## **Public Schools**

American Indian Candidates



	Candid	ates		Exa	ms	
	Tota	1	Tota	1	Grades	3–5
	State	National	State	National	State	National
1995	514	2,082	804	2,989	437	1,427
1996	489	2,135	727	3,014	401	1,416
% Change from 1995	(4.9%)	2.5%	(9.6%)	0.8%	(8.2%)	(0.8%)
1997	499	2,186	779	3,162	419	1,590
% Change from 1996	2.0%	2.4%	7.2%	4.9%	4.5% :	12.3%
1998	481	2,361	714	3,445	401	1,757
% Change from 1997	(3.6%)	8.0%	(8.3%)	9.0%	(4.3%)	10.5%
1999	547	2,678	832 .	4,004	426	1,921
% Change from 1998	13.7%	13.4%	16.5%	16.2%	6.2% !	9.3%
% Change from 1995	6.4%	28.6%	3.5%	34.0%	(2.5%)	34.6%



	G	rade Distr	ibution	
	Numl	per	9/	6
	State	National	State	National
5	64	282	7.7%	7.0%
4	131	600	15.7%	15.0%
3	231	1,039	27.8%	25.9%
2	253	1,260	30.4%	31.5%
1	153	823	18.4%	20.6%



# 1999 California AP Report Public Schools

American Indian Candidates

	Number	ıber		Grad	Grade Distribution (%)	(%)	
Exams	Candidutes	Grades 3-5	\$	**	3	7	-
Art: History of	-	9	6.1%	9.1%	36.4%	27.3%	18.2%
Art: Studio-General Portfolio	7	∞	7.1%	21.4%	28.6%	35.7%	7.1%
Art: Studio-Drawing Portfolio	3	3	1	33.3%	%2'99	ı	1
Biology Control of the Control of th	42	21	7.1%	28.6%	14.3%	21.4%	. 28.6%
Chemistry	. 22	\$	4.5%	4.5%	13.6%	36.4%	40.9%
Computer Science A	ς.	4	1,5	40.0%	40.0%	1	20.0%
Economics: Macroeconomics	20		2.0%	15.0%	50.0%	70 OP	50.0%
Economics: Microeconomics	2 - 2	6	13.3%	40.0%	6.7%	6.7%	33.3%
English Language and Composition	80	42	7.5%	6.3%	38.8%	42.5%	2.0%
Environmental Science	l nor	36	. 0,0,01	15.8%	34.4%	33.1%	8.8%
French Language and Milliam Control of the Control	E				33.3%	33.3%	33.3%
French Literature Control Section Programme			1. 33.	1.	不 1 3 3 3	1.	# :
Cerman Language		1 ;	1	1 :		1	1
Government and Politics: Comparative	9 09	4	16.7%	24 6%:	50.0%		16.7%
History: European	38	91	2.6%	10.5%	28.9%	23.7%	34.2%
History: United States	147	64	%1.9	15.6%	21.8%	38.1%	18.4%
International English Language Comments of the					700 001		河
Latin Literature	<b>-</b> 1	- 1		1	0.001	ł	I
Mathematics: Calculus AB	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	36	12.3%	13.7%	23.3%	23.3%	
Mathematics: Calculus BC Med.	10	*6 %	40.0%	. 40.0%	10.0%		10.0%
Physics B Walter	7 5	1	1 . 1	- 00 00	%U 0C	33.3%	70L 9C .
Physics, C.; Mechanics; A. Control of the Control o	4			25.0%			\$0.0%
Psychology	2 9	101	31.3%	50.0%	18 8%	12.5%	50.0%
Spanish Language.	41	6()	2.4%	19.5%	24.4%	26.8%	26.8%
Spanish Literature Control of the co	4	2		25.0%	25.0%	. 50.0%	
Statistics	21	10	4.8%	4.8%	38.1%	45.9%	9.5%

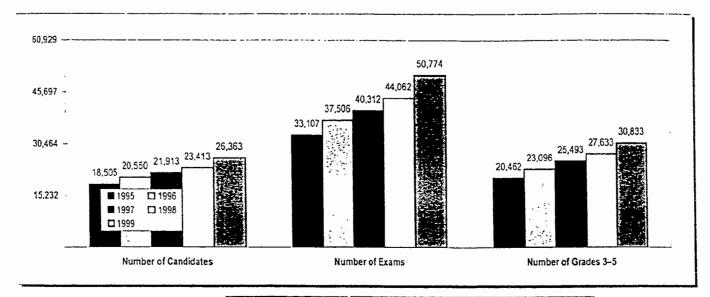
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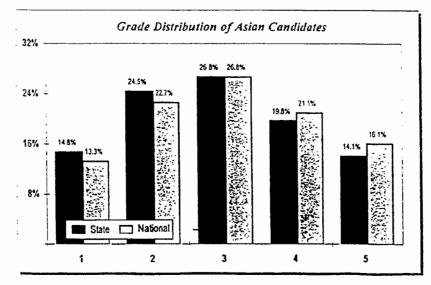


## **Public Schools**

Asian Candidates



	Candid	lates		Exa	ms	
	Tota	al	Tot	al	Grades	3-5
	State	National	State	National	State	National
1995	18,505	45,773	33,107	82,613	20,462	53,184
1996	20,550	49,730	37,506	91,022	23,096	59,143
% Change from 1995	11.1%	8.6%	13.3%	10.2%	12.9%	11.2%
1997	21,913	53,958	40,312	99,634	25,493	65,699
% Change from 1996	6.6%	8.5%	7.5%	9.5%	10.4%	11.1%
1998	23,413	57,910	44,062	108,376	27,633	70,855
% Change from 1997	6.8%	7.3%	9.3%	8.8%	8.4%	7.8%
1999	26,363	64,908	50,774	124,670	30,833	79,785
% Change from 1998	12.6%	12.1%	15.2%	15.0%	11.6%	12.6%
% Change from 1995	42.5%	41.8%	53.4%	50.9%	50.7%	50.0%



	G	rade Distr	ibution	
	Num	ber	9	6
i	State	National	State	National
5	7,178	20,109	14.1%	16.1%
4	10,039	26,269	19.8%	21.1%
3	13,616	33,407	26.8%	26.8%
2	12,442	28,295	24.5%	22.7%
1	7,499	16,590	14.8%	13.3%



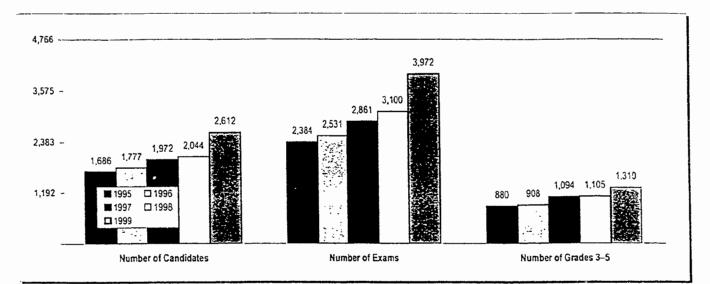
## 1999 California AP Report Public Schools Asian Candidates

	Numbe	ıber		Grad	Grade Distribution (%)	(%)	
Exams	Candidates	Grades 3-5	S	4	3	2	-
Ап: History of	819	424	10.4%	24.6%	33.7%	15.2%	16.2%
Art: Studio-General Portfolio	212	142	15.1%	20.8%	31.1%	28.3%	4.7%
Art: Studio-Drawing Portfolio	112	65	8.9%	21.4%	27.7%	36.6%	5.4%
Biology, No. of the state of th	4,460	3,077	23.2%	22.8%	22.9%	19.1%	%6.11
Chemistry	2,759	1,506	16.7%	14.4%	23.5%	22.3%	23.1%
Computer, Science, A.	.028	485		22.5%	19.4%	11.7%	32.5%
Computer Science AB	398	296	28.9%	15.8%	29.6%	.%8.6	15.8%
Economics: Macroeconomics	1,370	852		28.8%	16.9%	23.1%	14.7%
Economics: Microeconomics	1,238	775	14.5%	25.8%	22.2%	21.4%	%0.91
English Language and Composition	3,104	1,807		15.9%	34.3%	36.7%	5.1%
English Liferature and Composition Canal Composition	189'5	3,524	%8.6		33.3%	31.4%	6.5%
Environmental Science	474	284	1	1	1	1	ı
French Language	504	232	8.7%	8.1%	. 29.2%	28.0%	26.0%
French Literature 27 Person Property 1978	13. 13. 13. 13. 13. 13. 13. 13. 13. 13.	To the second	30.8%		23.1%	23.1%	23.1%
German Language	99	42	21.2%	13.6%	28.8%	34.8%	1.5%
Government and Politics: Comparative ; [1]	300	183	15.0%	. 13.7%	. 32.3%	23.3%	15.7%
Government and Politics: United States (f)	3,212	1,840	8.3%	16.0%	32.9%		12.9%
History: European	2,289	1,508	9.3%	18.7%	37.9%	18.7%	15.5%
History: United States	7,102	3,480	%8.6	18.9%	20.2%	34.7%	16.3%
International English Language 1981					100 mm		
Latin: Vergil	53	39	39.6%	17.0%	17.0%	13.2%	13.2%
Latin Literature	22	9	%1.6	4.5%	13.6%	1 .	72.7%
Mathematics: Calculus AB	6,144	3,982	%9:91	. 22.5%.	25.8%	19.2%	16.0%
Mathematics: Calculus BC.	2,151	1,664	36,6%	18.7%	22.0%	8.7%	13.9%
Music: Theory	188	153	27.1%	26.1%	28.2%	15.4%	3.2%
Physics B.	1,577	885	%9.6	15.3%	31.2%	. 18.3%	25.6%
Physics C. Mechanics (1) Control of the control of	706	195	15.4%	22.7%	24.1%	17.2%	20.6%
Physics C. Electricity and Magnetism	348	204	20.1%	19.3%	19.3%	26.1%	15.2%
Psychology	806	268	18.8%	23.0%	20.7%	21.0%	16.4%
Spanish Language, The Control of the	2,054	1,248	%6'8	20.0%	31.9%	24.7%	14.5%
Spanish Liferature of the State	.9116.7	66	13.8%	31.9%	39.7%	70.0%	3.4%
Statistics	726,1	670	10.7.7	22.010	200	207	20.07

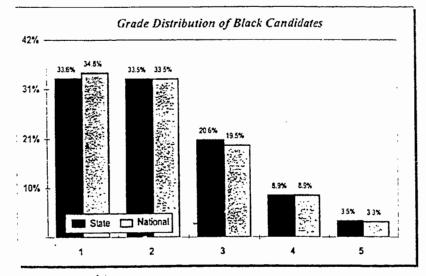
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Public Schools
Black Candidates



	Candio	lates		Exa	ms	
	Tota	3i	Tota	1	Grades	3–5
	State	National	State	National	State	National
1995	1,686 :	19,707	2,384	27,366	880	8,025
1996	1,777	19,644	2,531	27,432	908	8,696
% Change from 1995	5.4% '	(0.3%)	6.2%	0.2%	3.2%	8.4%
1997	1,972	21,363	2,861	29,953	1,094	9,864
% Change from 1996	11.0%	8.8%	13.0%	9.2%	20.5%	13.4%
1998	2,044	23,514	3,100	33,497	1,105	10,708
% Change from 1997	3.7%	10.1%	8.4%	11.8%	1.0%	8.6%
1999	2,612	27,263	3,972	39,931	1,310	12,656
% Change from 1998	27.8%	15.9%	28.1%	19.2%	18.6%	18.2%
% Change from 1995	54.9%	38.3%	66.6%	45.9%	48.9%	57.7%



	G	irade Disti	ribution	
	Num	ber	9	'a
	State	National	State	National
5	138	1,305	3.5%	3.3%
4	352	3,555	8.9%	8.9%
3	820	7,796	20.6%	19.5%
2	1,329	13,382	33.5%	33.5%
1	1,333	13,893	33.6%	34.8%



## 1999 California AP Report Public Schools Black Candidates

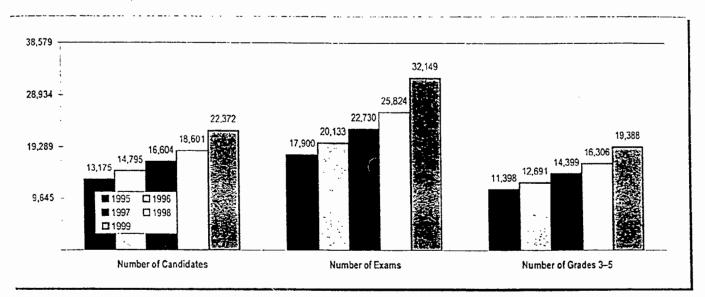
	Numbe	nher		Grad	Grade Distribution (%)	(%)	
Exams	Candidates	Grades 3-5	5	4	3	2	-
Art: History of	- 56	22	3.6%	16.1%	%9.61	17.9%	42.9%
Art: Studio-General Portfolio	21	01	4.8%	9.5%	33.3%	42.9%	9.5%
Aft: Studio-Drawing Portfolio	14	=	1	35.7%	42.9%	14.3%	7.1%
Biology	217	81	8.3%	10.6%	18.4%	30.9%	31.8%
Chemistry	137	35	4.4%	2.8%	15.3%	20.4%	24.0%
Computer Science A 18 18 18 18 18 18 18 18 18 18 18 18 18	15.	7555 F. S.	%2.9	33.3%	6.7%	13.3%	,40.0%
Computer Science AB A Charles Computer Science AB	7	.5.			28.6%	14.3%	14.3%
Economics: Macroeconomics	19	25	%9:1	23.0%	16.4%	23.0%	36.1%
Economics: Microeconomics	62	16	4.8%	4.8%	16.1%	22.6%	\$1.6%
English Language and Composition	460	134	1.5%	2.9%	21.7%	49.8%	21.1%
English Literature and Composition (2015) And Composition	158	7500	2.5%	6.5%	26.1%	40.1%	24.8%
Environmental Science	57	9		1	1	l	1
French Language The Control of the C		01	77%	11.5%	19.2%	.19.2%	42.3%
French Literature 1621 1880 1880 1880					-1		
German Language	C1	-	20.0%	I	i	20.0%	1
Government and Politics: Comparative	. 18	∞,	11.1%	11.1%	22.2%	27.8%	27.8%
Government and Politics: United States	392	139		7.9%	26.8%	34.7%	29.8%
History: European	165	62	1.2%	14.5%	21.8%	28.5%	33.9%
History: United States	739	204	3.7%	9.1%	14.9%	36.0%	36.4%
International English Language (Contraction)							
Latin: Vergil	2	-	\$0.0%	1	ı	20.0%	
Latin Literature	1	1	1	i	ı	;	1
Mathematics: Calculus AB:	331	109	5.1%	9.4%	18.4%	28.1%	39.0%
Mathematics: Calculus BC 600000000000000000000000000000000000	25	C. C. S. 14.	%0.8	. 20.0%	28.0%	20.0%	24.0%
Music: Theory	7	4	14.3%	42.9%	1	42.9%	1
Physics B	71	. 15	4.2%	1.4%	15.5%	%6.91	62.0%
Physics C: Mechanics	29.	A STATE OF THE STA	3.4%	3.4%	%6.9	27.6%	58.6%
Physics C: Electricity and Magnetism	9			: l`i	1:	20.0%	20.0%
Psychology	09	2.4	6.7%	%0.01	23.3%	30.0%	30.0%
Spanish Language	146		6.2%	13.7%	28.8%	19.2%	32.2%
Service Contraction	7.0	11. 12. 12. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13	1 20%	%0.01	%0.07 70.797	702.31	70.0%
Statistics	0/	57	1.370	0/2:11	10.7.0	10.7%	02.070

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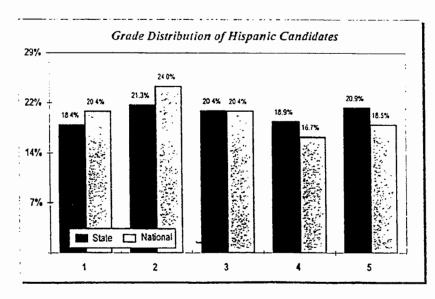


## **Public Schools**

All Hispanic Candidates



	Candid	iates		Exa	ms	
	Tota	şl	To	tal	Grades	3–5
	State	National	State	National	State	National
1995	13,175	32,038	17,900	44,718	11,398	26,494
1996	14,795	35,742	20,133	50,027	12,691	29,689
% Change from 1995	12.3%	11.6%	12.5%	11.9%	11.3%	12.1%
1997	16,604	40,320	22,730	56,860	14,399	33,673
% Change from 1996	12.2%	12.8%	12.9%	13.7%	13.5%	13.4%
1998	18,601	45,998	25,824	65,642	16,306	38,018
% Change from 1997	12.0%	14.1%	13.6%	15.4%	13.2%	12.9%
1999	22,372	54,748	32,149	80,766	19,388	44,938
% Change from 1998	20.3% '	19.0%	24.5%	23.0%	18.9%	18.2%
% Change from 1995	69.8%	70.9%	79.6%	80.6%	70.1% !	69.6%



	G	rade Distr	ribution :	
	Num	ber	9,	6
	State	National	State	National
5	6,732	14,933	20.9%	18.5%
4	6,084	13,505	18.9%	16.7%
3	6,572	16,500	20.4%	20.4%
2	6,840	19,383	21.3%	24.0%
1	5,921	16,445	18.4%	20.4%



## 1999 California AP Report Public Schools

All Hispanic Candidates

Candle Ca	218 134 134 134 134 134 134 134 13960 177 1396 177 133 1312 141 166 111 1780 1780 1780 1780 1780 1780 1780	5 5.0% 10.1% 10.9%	4	3	2	-	
		5.0% 10.1% 10.9%					
		10.1% 10.9%	19.3%	37.2%	15.6%	22.9%	
		10.9%	17.4%	22.1%	29.5%	20.8%	
		%1.9	14.5%	34.5%	25.5%	14.5%	
			11.3%	19.3%	. 28.6%	34.1%	
	7 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	4.7%	5.3%	14.9%	26.8%	48.3%	
		%8.9	. 15.3%.	23.7%	15.3%	39.0%	
	5	9.1%	12.1%	12.1%	. 18.2%	48.5%	
	1 2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4.0%	18.0%	13.2%	33.8%	31.0%	
	所とってい	3.5%	15.4%	16.7%	28.8%	35.6%	
		2.3%	%8'9	22.5%	49.8%	18.6%	
	3,203	3.5%	7.8%	. 54.9%	42.5%	21.3%	
	206 42	ı	l	. 1		. I	
	77	3.0%	3.7%.	19.2%	.26.3%	47.8%	
	4		25.0%	. \$ 25.0%	25.0%	1	
3	14	14.3%	7.1%	7.1%	57.1%	14.3%	
	97.	8.2%	93%	24.7%	30.9%	26.8%	
	759	2.8%	%8.6	26.0%	32.0%	29.3%	
	737 314	4.1%	%0.6	29.6%	23.1%	34.3%	
English Language (2) 전체 (기계 기계 기	,388	2.5%	%0.6	14.0%	38.8%	35.7%	
ıl	新教育 医原生工法	には必然ら				; ı	
Lic	-	ı	100.0%	ı	. 1	· I	-
The same of the sa	-	1	1	1	1	100.0%	
Calculus AB	887.	%0.9	13.7%	. 23.2%.	21.6%	35.4%	
Mathematics: Calculus BC	215.	17.2%	. 8.4%	. 20.9%	14.9%	38.6%	
Music: Theory	45 27	6.7%	13.3%	40.0%	20.0%	20.0%	
	353 107	3.7%	2.9%	20.7%	15.6%	54.1%	-
Acchanics	135	5.2%	%9.6	13.3%	8.9%	63.0%	921
Physics C. Electricity and Magnetism	35	2.9%	20.0%	2.9%	20.0%	54.3%	
	273   118	6.2%	19.8%	17.2%	28.2%	28.6%	
Spanish Language	738 11,298	50.1%	32.1%	14.1%	3.0%	0.7%	
	2,741: 11,943	5.3%	21.5%	. 44.1%	. 20.9%:	8.2%	
	413   121	2.9%	7.3%	19.1%	19.9%	20.8%	

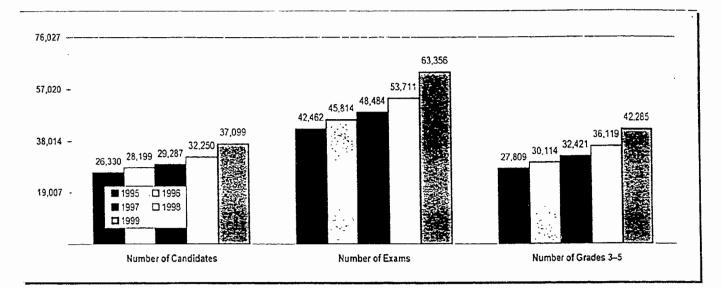
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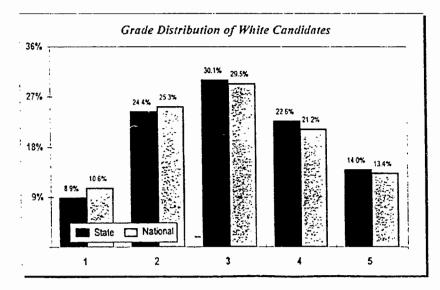


## **Public Schools**

White Candidates



	Candid	lates		Exa	ms	
	Tota	al	Tota	1	Grades	3-5
	State	National	State	National	State	National
1995	26,330	270,610	42,462	413,112	27,809	253,985
1996	28,199	284,076	45,814	436,506	30,114	275,480
% Change from 1995	7.1%	5.0%	7.9%	5.7%	8.3%	8.5%
1997	29,287	305,357	48,484	475,733	32,421	305,246
% Change from 1996	3.9%	7.5%	5.8%	9.0%	7.7%	10.8%
1998	32,250	331,425	53,711	521,809	36,119	334,781
% Change from 1997	10.1%	8.5%	10.8%	9.7%	11.4%	9.7%
1999	37,099	365,799	63,356	587,655	42,285	376,632
% Change from 1998	15.0%	10.4%	18.0%	12.6%	17.1%	12.5%
% Change from 1995	40.9%	35.2%	49.2%	42.3%	52.1%	48.3%



- 1	G	rade Distr	ribution	
	Num	ber	9/	o .
	State	National	State	National
5	8,854	78,532	14.0%	13.4%
4	14,349	124,843	22.6%	21.2%
3	19,082	173,257	30.1%	29.5%
2	15,445	148,487	24.4%	25.3%
1	5,626	62,536	8.9%	10.6%

A. 18

# 1999 California AP Report Public Schools

California

	Nun	Number		Gruu	Grude Distribution (%)	1 (%)	
Exams	Candidates	Grades 3-5	5	4	3	2	-
Art: History of	809	465	13.3%	28.3%	34.9%	16.0%	7.6%
Art: Studio-General Portfolio	452	261	9.1%	15.5%	33.2%	35.4%	%6.9
Aft: Studio-Drawing Portfolio	164	911		23.2%	37.2%	25.0%	4.3%
Biology	4,100	2,926	23.3%	24.3%	23.8%	20.0%	%9.8
Chemistry	1,985	1,195	16.5%	14.7%	29.0%	24.0%	15.8%
Computer Science A.	540.	371	25.7%	27.4%	, 15.6%	8.1%	23.1%
Computer Science AB	276	210	33.3%	15.9%	26.8%.	%8.6	14.1%
Economics: Macroeconomics	1,557	945	11.8%	31.4%	17.5%	29.2%	10.1%
Economics: Microeconomics	1,133	177	14.2%	30.3%	23.6%	21.6%	10.3%
English Language and Composition	2,606	3,737			37.6%	31.8%	1.6%
English Literature and Composition	9,631	3.7.1415	11.9%	24.5%	37.8%	23.5%	2.3%
Environmental Science	549	352		1	1		1 3
French Language	775	462	, i	12.5%	30.8%	24.4%	16.0%
French Literature 187	45	417	``	.48.9%	13.3%	4.4%	4.4%
German Language	274	091	17.5%	17.9%	23.0%	29.6%	12.0%
Government and Politics: Comparative	437	760		12.6%	32.5%	24.7%	15.8%
Government and Politics: United States	4,959	3,540	11.4%	24 1%	35.9%	22.7%	2.9%
History: European	3,368	2,263	9.5%	19.7%	38.0%	19.9%	12.9%
History: United States	10,391	5,576	10.0%	21.3%	22.4%	36.5%	%6.6
International English Language						100000000000000000000000000000000000000	
Latin: Vergil	19	39	24.6%	16.4%	23.0%	21.3%	14.8%
Latin Literature	91	5	6.3%	6.3%	18.8%	6.3%	62.5%
Mathematics: Calculus AB	5,985	4,393	20,4%	26.2%.	26.8%	16.2%	10.4%
Mathematics: Calculus BC	1,253	1,015	39.3%	18.9%	22.8%	8.9%	10.1%
Music: Theory	205	163	25.9%	30.7%	22.9%	19.0%	1.5%
Physics B	1,576	1,021	12.6%	19.7%	32.6%	15.6%	19.6%
Physics C: Mechanics, 111	161		18.3%			16.1%	14.2%
Physics C: Electricity and Magnetism	243	162	26.3%	23.5%	%6.91	19.3%	14.0%
Psychology	1,113	109	21.8%	25.3%	24.6%	19.3%	8.9%
Spanish Language	3,241	2,067		20.7%	33.3%	24.3%	11.9%
Spanish Literature	157	134		28.7%	40.8%	10.8%	3.8%
Statistics	1,859	1,139	8.5%	21.4%	31.4%	22.4%	16.3%
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# 1999 AP Summary Report Public Schools All States by Gender

		Total			Male			Female	
	# Candidates	# Exams	# Grades 3-5	# Candidates	# Exams	# Grades 3-5	# Candidates	ll Exams	# Grades 3-5
Alabama	4,727	6,830	3,761	1,978	3,068	1,837	2,749	3,762	1,924
Alaska	1,433	2,556	1,740	631	1,228	898	805	1,328	872
Arizona	6,260	9,822	6,013	2,707	4,464	2,856	3,553	5,358	3,157
Arkansas	2,967	4,567	2,390	1,269	2,072	1,188	1,698	2,495	1,202
California	996,001	171,233	107,076	43,636	77,322.	50,113	57,330	93,911	56,963
Colorado	9,344	14,398	9,293	4,097	6,562	4,461	5,247	7,836	4,832
Connecticut	7,763	12,341	8,734	3,368	5,562	4,091	4,395	6,779	4,643
Delaware	1,056	1,660	1,040	490	823	240	995	837	200
D.C.	505	746	373	176	275	156	329	471	217
Florida	34,615	59,762	32,831	14,564	26,173	15,289	20,051	33,589	17,542
Georgia	15,209	23,975	13,028	6,324	10,403	060'9	.8,885	13,572	6,938
Hawaii Cara Barana	1,392	2,060	1,116	570	871	496	822	1,189	620
Idaho	1,927	2,873	1,815	888	1,371	945	1,039	1,502	870
Illinois	21,846	38,342	28,003	10,402	19,346	14,751	11,444	966'81	13,252
Indiana	8,503	12,457	5,990	3,836	5,707	2,929	4,667	6,750	3,061
Iowa	3,217	4,631	3,289	1,589	2,364	1,738	1,628	2,267	1,551
Kansas	2,746	3,662.	2,317	1,221	1,698	1,139	1,525	1,964	1,178
Kentucky	5,315	7,864	3,633	2,265	3,465	1,767	3,050	4,399	1,866
Louisiana	1,659	2,424	1,479	069	1,086	695	696	1,338	784
Maine	2,405	3,412	2,286	1,036	1,539	1,096	1,369	1,873	1,190
Maryland	13,742	22,304	15,694	5,814	10,040	7,416	7,928	12,264	8,278
setts	13,849	171,22	15,423	5,955	6,676	7,306	7,894	12,192	8,117
Michigan	16,306	24,934	16,020	7,265	11,730	7,895	9,041	13,204	8,125
Minnesola	10,346	15,449	9,274	4,714	7,279	4,671	5,632	8,170	4,603
Mississippi	2,215	3,161	1,089	864	1,280	489	135,1	1,881	009
Missouri	3,587	5,342	3,818	1,692	2,638	1,9.45	1,895	2,704	1,873
Montana	1,457	2,082	1,499	628	922	869	829	1,160	801

## 1

## 1999 AP Summary Report Public Schools All States by Gender

# Condidiotes   # Fronts   # Condidiotes   # Co			Total			Male			Female	
1,221       1,648       1,033       567       783         2,530       4,461       2,605       1,162       2,120         1,913       2,679       1,768       816       1,193         1,8424       31,559       22,367       8,522       15,270         2,457       3,720       1,943       1,070       1,720         17,941       30,186       16,357       7,527       12,995         5,350       7,616       4,349       2,577       12,995         5,050       7,616       4,314       2,267       3,594         5,050       7,616       4,314       2,267       3,594         5,050       7,616       4,314       2,267       3,594         5,050       7,616       4,314       2,267       3,594         1,245       1,681       1,084       1,084       1,084         1,012       1,506       8,239       3,810       6,276         1,012       1,506       8,239       3,810       6,276         6,544       10,161       6,142       2,777       4,528         6,544       10,161       6,142       2,777       4,528         1,401       2,032		# Candidates	# Exams	# Grades 3-5	# Candidates	# Exams	il Grades 3-5	# Candidates	# Exams	# Grades 3-5
2,530       4,461       2,605       1,162       2,120         1,913       2,679       1,768       816       1,193         18,424       31,559       22,367       8,522       15,270         2,457       3,720       1,943       1,720       1,720         58,302       95,451       60,849       25,736       43,549       2,595         17,941       30,186       16,357       7,527       12,995         5,050       7,616       4,314       2,267       3,594         5,050       7,616       4,314       2,267       3,594         1,245       1,681       1,054       3,643       2,267         9,402       1,681       1,054       3,343       2,267         1,245       1,681       1,054       3,38       2,640         9,402       14,975       8,239       3,810       6,276         1,012       1,506       8,239       3,810       6,276         6,544       10,161       6,142       2,777       4,528         6,544       10,161       6,142       2,777       4,528         1,401       2,032       1,325       6,154       1,368         <	Nebraska	1,221	1,648	1,033	267	783	503	654	865	530
1,913       2,679       1,768       816       1,193         18,424       31,559       22,367       8,522       15,270         2,457       3,720       1,943       1,720       1,720         58,302       95,451       60,849       25,736       43,549       2         17,941       30,186       16,357       7,527       12,995         5,050       7,616       4,314       2,267       3,594         5,050       7,616       4,314       2,267       3,594         5,050       7,616       4,314       2,267       3,594         3,859       5,364       3,643       1,838       2,640         1,245       1,681       1,084       5,563       13,771         1,245       1,681       1,084       5,563       13,771         1,012       1,506       80,356       41,4       6,276         46,810       80,356       43,966       19,958       36,146         6,544       10,161       6,142       2,777       4,528         6,544       10,161       6,142       2,777       4,528         1,401       2,032       1,2,694       5,562       9,154	Nevada	2,530	4,461	2,605	1,162	2,120	1,287	1,368	2,341	1,318
18,424     31,559     22,367     8,522     15,270       2,457     3,720     1,943     1,070     1,720       58,302     95,451     60,849     25,736     43,549       17,941     30,186     16,357     7,527     12,995       5,058     24,863     15,757     7,537     11,718       5,050     7,616     4,314     2,267     3,594       3,859     5,364     3,643     2,267     3,594       1,245     1,681     1,054     83,563     13,771       1,012     1,506     8239     3,810     6,276       6,544     10,161     6,142     2,777     4,528       6,544     10,161     6,142     2,777     4,528       6,544     10,161     6,142     2,552     9,154       1,670     18,449     12,694     5,562     9,154       1,401     2,032     1,325     607     872       24,647     42,628     26,418     10,842     19,086       8,715     12,511     8,180     3,950     5,834	New Hampshire	1,913	2,679	1,768	816	1,193	833	1,097	1,486	935
co         2,457         3,720         1,943         1,1070         1,720         2,549         2,549         2,549         2,549         2,549         2,549         2,549         2,549         2,549         2,549         2,549         2,549         2,549         2,549         2,549         2,549         2,549         2,549         2,540         3,544         3	New Jersey	18,424	31,559	22,367	8,522	15,270	11,231	9,902	16,289	11,136
58,302         95,451         60,849         25,736         43,549         2           olina         17,941         30,186         16,357         7,527         12,995         381           ota         57,68         24,863         15,757         7,537         11,718         3,594           s,050         7,616         4,314         2,267         3,594         3,643         1,838         2,640           na         1,245         1,681         1,054         3,643         1,838         2,640           nd         1,245         1,681         1,054         3,853         13,771           nd         1,245         14,975         8,239         3,810         6,276           ota         1,012         1,506         19,958         36,146         2,777         4,528           ota         1,670         18,449         12,694         5,562         9,154         2,146           1,401         2,032         1,326         5,562         9,154         2,156         9,154           1,401         2,032         1,326         5,562         9,154         19,086         19,086           1         24,647         42,628         26,418 <td< td=""><td>New Mexico</td><td>2,457</td><td>3,720</td><td>1,943</td><td>1,070</td><td>1,720</td><td>646</td><td>1,387.</td><td>2,000</td><td>966</td></td<>	New Mexico	2,457	3,720	1,943	1,070	1,720	646	1,387.	2,000	966
olina         17,941         30,186         16,357         7,527         12,995           ota         575         837         602         253         381           16,568         24,863         15,757         7,537         11,718           5,050         7,616         4,314         2,267         3,594           5,050         7,616         4,314         2,267         3,594           nia         1,245         1,681         1,084         5,364         13,771           nd         1,245         1,681         1,084         5,363         13,771           nlina         9,402         14,975         8,239         3,810         6,276           ota         1,012         1,506         80,366         19,958         36,146           ota         6,544         10,161         6,142         2,777         4,528           ota         6,546         10,161         6,142         2,777         4,528           ota         1,401         2,032         1,326         5,562         9,154           ota         24,647         42,628         26,418         10,842         19,086           ota         24,647         42,628	New York	58,302	95,451	60,849	25,736	43,549	29,225	32,566	51,902	31,624
ota         575         837         602         253         381           16,568         24,863         15,757         7,537         11,718           5,050         7,616         4,314         2,267         3,594           10         1,345         5,364         3,643         1,838         2,640           10         1,245         1,681         1,054         533         13,771           10         1,245         14,975         8,239         3,810         6,276           10         1,012         1,506         892         414         634           10         1,506         8,239         3,810         6,276           10         1,506         80,356         414         634           46,810         80,356         43,966         5,562         9,154           1,401         2,032         1,325         607         872           1,401         2,032         1,325         607         8,834           1         8,715         12,511         8,180         3,950         5,834	North Carolina	17,941	30,186	16,357	7,527	12,995	7,497	10,414	17,191	8,860
16,568 24,863 15,757 7,537 11,718 7,5050 7,616 4,314 2,267 3,594 3,643 24,305 18,905 18,905 18,905 13,771 7,100 14,975 8,239 3,810 6,276 11,012 1,506 892 41,4 634 65,44 10,161 6,142 2,777 4,528 607 87,2 607 87,2 607 87,2 607 87,2 607 87,2 607 87,2 607 8,715 12,614 8,180 3,956 5,834 10,887 12,634 10,842 19,086 11,807 8,715 12,511 8,180 3,956 5,834	North Dakota	575	837	602	253	381	290	322	456	312
5,050       7,616       4,314       2,267       3,594         nia       3,859       5,364       3,643       1,838       2,640         nia       1,245       1,681       1,054       533       749         nd       1,245       1,681       1,054       533       749         nlina       9,402       14,975       8,239       3,810       6,276         ota       1,012       1,506       802       414       6,34         ota       6,544       10,161       6,142       2,777       4,528         46,810       80,356       12,694       5,562       9,154         1,401       2,032       1,325       607       872         1,401       2,032       1,325       607       872         1,401       2,032       1,325       607       872         1,8,447       1,325       607       872       19,086         1,8,447       1,325       607       872       19,086         1,8,447       1,325       10,842       19,086       19,086         1,8,447       1,325       1,326       19,086       19,086         1,8,447       1,326       3,950 <td>Ohio</td> <td>16,568</td> <td>24,863</td> <td>15,757</td> <td>7,537</td> <td>11,718</td> <td>7,888</td> <td>9,031</td> <td>13,145</td> <td>7,869</td>	Ohio	16,568	24,863	15,757	7,537	11,718	7,888	9,031	13,145	7,869
3,859       5,364       3,643       1,838       2,640         18,716       28,799       18,905       3,563       13,771         1,245       1,681       1,054       533       749         9,402       14,975       8,239       3,810       6,276         1,012       1,506       892       414       634         6,544       10,161       6,142       2,777       4,528         46,810       80,356       12,694       5,562       9,154         1,401       2,032       1,325       607       872         1,401       2,032       1,325       607       872         24,647       42,628       26,418       10,842       19,086         8,715       12,511       8,180       3,950       5,834	Oklahoma	5,050	7,616	4,314	2,267	3,594	2,147	2,783	4,022	2,167
18,716       28,799       1,8905       28,563       13,771         1,245       1,681       1,054       533       749         9,402       14,975       8,239       3,810       6,276         1,012       1,506       892       414       634         6,544       10,161       6,142       2,777       4,528         6,544       10,161       6,142       2,777       4,528         7,777       4,528       36,146       2,777       4,528         11,670       18,449       12,694       5,562       9,154         1,401       2,032       1,325       607       872         1,401       2,032       1,325       607       872         8,715       12,511       8,180       3,950       5,834	Oregon.	3,859	5,364	3,643		2,640	1,845	. 2,021	2,724	1 798
1,245       1,681       1,054       533       749         9,402       14,975       8,239       3,810       6,276         1,012       1,506       892       414       634         6,544       10,161       6,142       2,777       4,528         46,810       80,356       43,966       12,694       5,562       9,154         1,401       2,032       1,325       607       872         1,401       2,032       1,325       607       872         24,647       42,628       26,418       10,842       19,086         8,715       12,511       8,180       3,950       5,834	Pennsylvania	18,716	28,799.	18,905	8,563	13,771	9,518	10,153	15,028	9,387
9,402 14,975 8,239 3,810 6,276 1,012 1,506 892 414 634 6,544 10,161 6,142 2,777 4,528 46,810 80,356 43,966 119,958 36,146 1,401 2,032 1,325 607 872 1,401 2,032 1,325 607 872 24,647 42,628 26,418 10,842 19,086 8,715 12,511 8,180 3,950 5,834	Rhode Island	1,245	189'1	1,054	533	749	486	712	932	895
6,544 10,161 6,142 2,777 4,528 46,810 80,356 2,19,958 36,146 2,177 1,670 18,449 1,325 607 872 872 8736 24,647 42,628 26,418 10,842 19,086 8,715 12,511 8,180 3,950 5,834	South Carolina	9,402	14,975	8,239	3,810	6,276	3,689	5,592	8,699	4,550
6,544 10,161 6,142 2,777 4,528 46,810 80,356 43,966 19,958 36,146 11,670 18,449 1,325 607 872 872 1,325 607 872 872 8,715 12,618 10,842 19,086 8,715 12,511 8,180 3,950 5,834	South Dakota	1,012	1,506	892	414	634	407	865	872	485
46,810     80,356     43,966     19,958     36,146       11,670     18,449     12,694     5,562     9,154       1,401     2,032     1,325     607     872       24,647     42,628     26,418     10,842     19,086       8,715     12,511     8,180     3,950     5,834	Tennessee	6,544	10,161	6,142	2,777	4,528	3,001	3,767	5,633	3,141
1,401 2,032 1,325 607 872 872 1,325 607 872 872 8,715 12,511 8,180 3,950 5,834	Texas	46,810	80,356	43,966	19,958	36,146	20,736	26,852	44,210	23,230
1,401     2,032     1,325     607     872       24,647     42,628     26,418     10,842     19,086       8,715     12,511     8,180     3,950     5,834	Utah	11,670	18,449	12,694	5,562	9,154	6,529	801'9	9,295	6,165
24,647         42,628         26,418         10,842         19,086         1           8,715         12,511         8,180         3,950         5,834	Vermont	1,401	2,032	1,325	209	872	574	794	1,160	751
8,715 12,511 8,180 3,950 5,834	Virginia	24,647	42,628	26,418	10,842	19,086	12,376	13,805	23,542	14,042
	Washington	8,715	12,511	8,180	3,950	5,834	3,960	4,765	6,677	4,220
3,077 1,730 890 1,428	West Virginia	2,039	3,077	1,730	068	1,428	848	1,149	1,649	882
16,730 11,300 2,4,935 7,716	Wisconsin	11,127	16,730	11,300	4,935	7,716	5,553	6,192	9,014	5,747
Wyoming 496 692 392 221 221 209	Wyoming	496	692.	392	221	311.	200	275	381	183
568,021 923,039 571,499 249,026 421,735 2	National	568,021	923,039	571,499	249,026	421,735	275.046	318,995	501,304	296,453

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### 1999 AP Summary Report Public Schools All States by Ethnic Group

		Total		Ame	American Ina	ıdian		Asian			Black		H	Hispanic	, ,		White	
	* Cemhdenes	# I,sums	# Greeder 3 5	# Grader 3 S # Candidates	F Urams	Godes 3 S	# Conhibuer	# Laura	# Grades 3 &	*Condulans	Lam	Crades 3 S	esurprinis) #	r Lyamy	# Grades 3.5	* Cambilator	F Games F	(index 3.5
Alabama	4,727	6,830	3,761	40	52	25	264	618	353	582	669	172	67	24	70	3,607	5,205	2,997
Alaska	1,433	2,556	1,740	39	62	33	98	188	601	23	40	8	26	7	28	1,106	0.970	1,380
Arizona	6.260		6,013	74	001	27	396	715	451	9/	611	7	748	1.067	609	4,229	6,673	4,175
Arkansas	2,967	4,567		. 15	21	9	112	202	125	191	208	51	44	98	51	2,461	3,779	2,008
California	100,966			547	832	426	26,363	50,774	30,833	2,612	3,972	1,310	22,372	32,149	19,388	37,099	63,356	42,285
Colorado	9 344	14,398	9,293	42	89	39	521	887	538	203	275	62	670	. 932	475	7,087	10,926	7,284
Connecticut	7,763	12,341	8,734	61	23	16	476	908	648	233	333	126	357	482	325	5,875	9,299	6,659
Delaware	1,056	1,660	1,040	4	7	5	102	061	119	51	7.5	35	17	34	22	798	1,215	761
D.C.	505	746	373	C .	7	١.	27	4	8.	292	357	136	64	76	37	16	170	118
	34,615	59,762	32,831	126	209	105	2,274	4,709	2,612	2,593	4,122	1,320	6,258	10,241	189,8	20,154	35,059	20,127
Georgia	15,209	23,975		44	73	30	1,199	2,353	1,430	2,493	3,598	846	285	427	2:12	10,106	.15,778	9,493
Hawaii	1,392	2,060	9111	4	9	4	943	1.399	726	<u> </u>	82	7	29	39	21	592	. 402	255
Idaho	1,927	2,873	1,815	\$	∞	2	09	101	54		=	9	45	63	28	1,615	2,378	1,499
Illinois	21,846	38,342	28,003	38	\$\$	34	3,111	6,397	4,755	916	1,309	446	1,336	1,914	1,028	14,780	25,741	19,600
Indiana	8,503	12,457	5,990	24	34	21	306	878	349	263	354	<u>~</u>	132	104	63	7,292	10,560	150,2
Iowa	3,217	4,631	3,289	<b>S</b>		~	124	195	136	25	40	20	36	48	34	2,699	3,849	2,742
Kansas	2,746	3,662	2,317	<u> </u>	53	Ξ	179	277	189	180	204	. 23	72	œ.	52	2,071	2,766	1,842
Kentucky	\$,315	7,864			25	6.:	.147	266	121,50	111	156	53	. 43	09	31	4,762	7,022	3,199
Louisiana	1,659	2,424	1,479	\$	9	3	091	304	506	250	337	133	41	75	53	1,102	1,556	982
Maine	2,405	3,412	2,286	3	3	1	44	62	39	∞	Ξ	7	15	24	61	2,130	3,007	2,007
Maryland	13,742	22,304	15,694	39	63	42	1,608	3,057	2,280	1,274	1,834	729	424	657	493	8,997	14,466	10,517
Massachusetts	13,849		15,423	. 22	36	81	1,148	2,106	1,431	283	421	181	409	286	367	10,557	16,719	11,728
Michigan	16,306			.58	78 87	. 47	1,033	2,041	1,487	805	111	310	258	381	249	12,757	19,085	12,167
Minnesota			70,274		39	18	533	846	446	<u>۶</u>	139	57	105	155	68	8,885	13,235	8,004
Mississippi	2,215	3,161	1,089	•	•	2	59	112	51	\$12	725	83	17	33	22	1,454	2,036	098
Missouri	3,587	5,342	3,818	12	91	12	200	394	304	126	171	9/	39	53	39	2,936	4,284	3,063
Montana	1,457	2,082	1,499	32	35	6	22	30	23	9	6	8	16	26	19	1,250	1,793	1,294
		•																

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### 1999 AP Summary Report Public Schools All States by Ethnic Group

		Total		Amer	American Inc	dian		Asian			Black	\$	H	Hispanic	53		White	
	. Comfuters	# frams	Cirales 3 S Cambridges	f Cambidates	1 /remi	Grades 3-8	" Combidines	* 1.sum	Firader 3 S	# Canabatura	i Leaner	# Grades 3. S	# Carclelates	J. Cama	I Grake 3 5 # Cambidities	# Cambakares	K frame	Comber 3 S
Nebraska	1,22,1	1,648	1,033	4	9	-	34	47	29	12	13	.9	15	20	12	1,066	1,424	897
Nevada	2,530	4,461	2,605	24	37	12	288	545	322	48	79	40	204	285	174	1.753	3,142	1,819
New Hampshire	1.913	2,679	1,768	<del>-,</del>	•	٧.	52	7.5	54	৵	∞	3	15	61	12	1,606	2,229	1.450
New Jersey	18,424	31,559	22,367	31	52	29	3,179	6,269	4,797	703	1,003	375	1,042	1,490	931	11,367	19,151	13,647
New Mexico	2,457	3,720	1,943	.137	189	31	103	182	105	27	40	13	612	869	357	1,279	2,000	1,182
New York	58,302	95,451	60,849	151	230	114	6,967	12,883	8,631	3,253	4,566	1,504	4,606	6,110	3,853	36,357	60,372	39,517
North Carolina	17,941	30,186	16,357	101	148	62	802	1,639	946	1,52.4	2,340	640	247	434	152	14,169	23,785	13,363
North Dakota	\$78	837	602	ñ	4	4	7	22	8	-	7	١	~	80	7	521	747	532
Ohio	16,568	24,863	15,757	52	79	29	780	1,560	1,154	721	066	283	193	267	141	13,557	20,048	12,862
Oklahoma	5,050	919'2'	4,314	306	422	161	341	630	384	288	396	811	146	227	97	3,584	5,337	3,128
Oregon,	3,859	5,364	Ĩ.,	32	₹	27	289	457	322	91	. 23	15	110	153	104	3,091	4,220	2,835
Pennsylvania,	18,716	28,799	18,905	27	39	18	1,178	2,207	1,522	443	868	224	. , 229	329	112	15,241	23.173	15,240
Rhode Island	1,245	1,681	1,054	9	S	-	45	62	43	20	22	=	46	53	34	196	1,301	808
South Carolina	9,402	14,975	8.239	37	63	38	316	894	384	1,419	2,032	906	124	161	114	6,931	11,187	6,672
South Dakota	1,012	1.506	892	4	4		25	46	24	3	7	٧,	œ	13	6	006	1,320	375
Tennessee	6,544	10,161	6,142	24	36	24	337	189	457	689	1,030	350	96	131	91	.900%	7,632	4,812
	46,810	80,356	43,966	214	375	176	4,030	8,793	5,786	2,095	3,356	656	11,554	17,693	7,478	25,702	44,488	26,244
Utah	11,670	18,449	12,694	. 33	44	. 24	315	538	335	24	14	26	243	371	230	10,183	16,042	11,081
Vennont	1.401	2,032	1,325	<u>e</u>	\$	4	15	28	91	~	~	М	=	17	13	1,248	1,813	1.160
Virginia	24,647	42,628	26,418	96	691	16	2,546	5,010	2,899	1,766	2,678	1,037	880	1,413	606	17,098	29,432	18,970
Washington	8,715	12,511	8,180	73	97	77	1,308	1.971	1,149	151	661	67	246	323	192	650'9	8,653	5,864
West Virginia	2,039	3,077	1,730	7	=	٥	82	191	115	3.5	20	20	4	32	27	1,798	2,659	1,452
Wisconsin	11,127	16,730	11,300	. 36	. 31	28	346	809	405	144	201	75	179	245	146	9,735	14,595	968'6
Wyoming	964	693.00	692 392	2 2 2	2,007	1,70	01	14	20.702	37.362	44	3 3	91	22	6	419	576	332
in Court	100 000	CON'C M	211.433	6,0,0	4,000	1,22,	04,200	14.0.0	75, 103	C07'/7	166,85	17.0.10	34,740	011, 700	44,738	202,797	1 660,756	2.0,032

### 1999 AP Data Sources

### Candidates

The 1999 data in these reports are based on 1998–99 high school students who took at least one AP exam in 1998–99. The trend data are based on the same category of 1994–95, 1995-96, 1996-97, and 1997-98 students. A candidate who took, for example, one AP exam in 1998 and another one in 1999 would be included in both the 1998 and 1999 numbers of AP Candidates.

The *National* numbers are based on the number of AP takers in the fifty states and D.C. only. They do <u>not</u> include foreign students, or students from U.S. territories.

### Exams

The number of exams taken in a given year includes the exams taken in that year only. This year there is no new AP exam offered. The number of candidates who took any one of the exam as well as their grade distribution can be found on Report A.4 (for all candidates), Report A.6 (for male candidates), Report A.8 (for female candidates), etc.

### Academic and demographic features of 1.2 million SAT® takers in the high school class of 1999

Trends in the college-bound population. Compared with SAT® takers who graduated from high school 10 years ago, those in the Class of 1999 are more racially/ethnically diverse, come from better educated families, and are entering college with more math, science and honors courses and better grades. SAT math scores reflect these academic changes, but verbal scores changed little. Non-Asian minorities continued to score relatively low, reflecting variables like fewer academic courses, lower grades and class rank, and lower levels of parental education and income. Average SAT scores of students in rural and large-city schools were below those in three other localities for similar reasons. Although women reported higher class rank and grades and more honors courses than men in all subjects except math, they also tended to come from families with less education and income and were more likely to be the first in their families to go to college—traits associated with lower test scores.

The SAT verbal average stayed at 505 for a fourth year, and did not change this year for men (509), women (502), African American (434), Asian American (498), Mexican American (453), and Other (511) students. American Indian/Alaskan Natives experienced the largest one-year increase (4 points), followed by Puerto Ricans (3 points), Hispanic/Latinos (2 points), and whites (1 point). Average scores for women rose for American Indians (4 points) and Hispanic/Latinos (3 points), and fell 1 point to 495 for Asian Americans. Average SAT verbal scores for men rose 6 points for Puerto Ricans, 2 points for American Indians and Asian Americans, and 1 point for Hispanic/Latinos.

The SAT math average fell 1 point to 511 this year, the first decline in nine years. The average math score for men stayed at 531 but dropped 1 point to 495 for women. Average SAT math scores were unchanged for white women but fell for women in all other racial/ethnic groups - 5 points for Asian American women and 4 points each for African American and Mexican American women. SAT math averages rose for Puerto Rican men (5 points) and white men (1 point), but fell for Mexican American (5 points), African American (2 points), and Hispanic/Latino men (1 point).

Minority students were one-third of SAT takers in the Class of 1999, up from 25 percent 10 years ago. SAT takers were 11 percent African American, 9 percent Asian American, 4 percent Mexican American, 3 percent Hispanic/Latino, and 1 percent Puerto Rican. English was not the native language for 39 percent of Asian American and Hispanic/Latino, 28 percent of Mexican American, and 25 percent of Puerto Rican students.

Grade inflation continued. SAT graduates had a grade-point average of 3.24 on a four-point scale (A = 4.00), well above the average of 3.08 in 1989, and 39 percent of them had grade averages of A+, A, or A-, up from 38 percent last year and 28 percent 10 years ago. However, this increase in the three "A" grade levels was accompanied by a decline in SAT scores, indicating possible grade inflation.

Parents are better educated. Over the decade, the percentage of parents with at least a bachelor's degree rose from 51 to 54 percent. The three racial/ethnic groups with above-average percentages of parents with graduate degrees are Other (29 percent), Asian American (28), and white (27).

Rigorous courses can raise SAT scores. This year, 51 percent of students took 20 or more yearlong academic courses before high school graduation. At this high level, SAT scores were 41 points above the national average for verbal and 39 for math. Overall, students reported an average of 19.4 yearlong academic courses. Women reported an average of 19.5 courses and men 19.0. Whites and Other racial/ethnic groups reported the most (19.6 yearlong courses) and Mexican Americans the least (18.1).

### Cautions on the use of aggregate SAT scores\*

As measures of developed verbal and mathematical abilities important for success in college, SAT scores are useful in making decisions about individual students and assessing their academic preparation. Using these scores in aggregate form as a single measure to rank or rate teachers, educational institutions, districts, or states is invalid because it does not include all students. In being incomplete, this use is inherently unfair.

The most significant factor in interpreting SAT scores is the proportion of eligible students taking the exam-the participation rate. In general, the higher the percentage of students taking the test, the lower the average scores. In some states, a very small percentage of college-bound seniors take the SAT. Typically, these students have strong academic backgrounds and are applicants to the nation's most selective colleges and scholarship programs. Therefore, it is to be expected that the SAT verbal and mathematical averages reported for these states will be higher than the national average. In states where a greater proportion of students with a wide range of academic backgrounds take the SAT, and where most colleges in the state require the test for admission, the scores are closer to the national average. Thus, to make useful comparisons of students' performance between states, a common test given to all students would be required. Because the percentage of SAT takers varies widely among the states, and because the test takers are self-selected, the SAT is inappropriate for his purpose.

In looking at average SAT scores, the user must understand the context in which the particular test scores were earned. Other factors variously related to performance on the SAT include academic courses studied in high school, family background, and education of parents. These factors and others of less tangible nature could very well have a significant influence on average scores. This is not to say, however, that scores cannot be used properly as one indicator of educational quality. Average scores analyzed from a number of years can reveal trends in the academic preparation of students who take the test and can provide individual states and schools with a means of self-evaluation and self-comparison.

By studying other indicators—such as retention/attrition rates, graduation rates, number of courses taken in academic subjects, or scores on other standardized tests—one can evaluate the general direction in which education in a particular jurisdiction is headed. A careful examination of other conditions impinging on the educational enterprise, such as pupil-teacher ratios, teacher credentials, expenditures per student, and minority enrollment, is also important.

Summaries of scores and other information by state, college, or school district can be used in curriculum development, faculty staffing, financial aid assessment, planning for physical facilities, and student services such as guidance and placement. Aggregate data can also be useful to state, regional, and national education policymakers, especially in tracking changes during a period of time.

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### How prevalent are changes in school and district SAT I scores?

The table below can help educators and reporters evaluate whether a one-year change in mean SAT I verbal and mathematics scores is unusual for the 1998-99 school year. The table is based on schools and districts in which at least 50 college-bound seniors took the SAT. It shows the percentage of schools and districts whose mean scores or fell at least 10, 20, 30, 40 and 50 points (1) by size of their test-taking populations (50 to 99, 100 to 299, and 300 or more test takers) and (2) across all schools and districts. Note that low-volume schools and districts tend to have larger score changes. For example, 60 percent of schools and districts with 50-99 test takers saw their SAT verbal means rise or fall 10 or more points, about double the 28 percent of schools and districts with 300 or more test takers.

### Percentage of schools and districts with higher or lower SAT scores in 1998-99

	Score rose or fell at least this many points	with this	of schools and much score of er of test take 100-299	hange,	Percent of all schools and districts with this much score change
SAT Verbal	10	60	46	28	50
	20	29	13	3	18
	30	12	3	0	6
	40	. 4	0	0	2
	50	l	0	00	0
SAT Math	10	61	48	31	51
	20	29	15	7	19
	30	11	3	0	6
	40	4	1	0	2
	50	l	0	0	1

### What factors could affect the SAT scores of a school or district?

There is an extremely complex relationship between SAT scores, which indicate verbal and math reasoning skills, and academic, demographic, and socioeconomic factors like sex, race, ethnicity, parental education, and family income. For this reason, explanations of score differences between schools, districts, or other subgroups of the testing population should take multiple factors into account. Even though SAT scores tend to be high for students with high grades and many years of academic coursework, for example, they do not have a perfect one-to-one causal relationship with grades and courses because many other factors affect the development of verbal and mathematical reasoning skills. Similarly, although SAT scores reflect how much academic work students undertake in high school, they are not a direct measure of the effectiveness of school curriculum or teaching.

The proportion of students taking the test is the most important factor to consider when attempting to interpret SAT scores for a state, school, or district. As proportions rise, scores tend to fall.

For most schools, annual score changes are not as significant as trends over time.

Table 1: What do this year's college-bound SAT and AP students look like?

	Gradi	uates wit	th			Gradi	uates wi	th	_
		Scores*		AP grades**			cores*		AP grades*
	1989	1999	All	3,4,or 5		1989	1999	All	3,4,or5
SAT means are up					Greater ethnic diversity			_	
Verbal	504	505	586	615	Amer. Indian/Alaskan Native	2%	1%	1%	
Male	510	509	595	621	Asian/Asian Amer./Pac. Island	er 7	9	12	13%
Female	498	502	579	610	African Amer./Black	10	11	6	3
Math	502	511	594	621	Mexican American	3	4	4	4
Male	523	531	622	647	Puerto Rican	1	1	1	1
Female	482	495	572	599	Hispanic or Latino	2	3	4	4
					White	75	67	69	71
AP students take more hone	ors cour	rses			Other	1	4	4	4
English	30%	37%	69%	73%	- <b> </b>	-			·
Mathematics	22	29	60	65	Greater language diversity				
Social science/history	20	29	60	64	English	85%	82%	80%	80%
Namural science	20	29	58	63	English and another	9	10	10	10
Foreign/classical languages	13	18	38	43	Another language	6	8	10	10
Art and music	6	8	13	15	. Hittier ranguage	Ü	Ü	•	10
. 21 424		-			U.S. citizenship is declining				
Academic goals are high					U.S. citizen	94%	92%	93%	93%
Certificate program	2%	1%			Permanent resident	4	4	5	5
Associate degree	2	2			Citizen of another country	2	3	2	2
Bachelor's degree	29	24	14%	12%	Cruzen of another country	_	,	٠	2
Master's degree	27	31	33	33	Greater need for financial a	A 670%	75%	760/	74%
Doctoral/related degree	18	22	35	38	Oreater deed for imaneiar a	<u>u</u> 0770	1370	7070	1470
Other	1	1			Health careers are most pop				
Undecided	21	19	16	17	Health related	12%	16%	17%	16%
Chachac	21	1,	10	1,	Business	22	14	11	10 / 0
					Social science/history	13	10	12	13
Parental education is rising					Education	7	9	6	5
No high school diploma	± 4%	4%	4%	3%	Engineering	10	8	11	12
High school diploma	37	33	22	18	Arts: Visual and performing	6	7	6	7
Associate degree	7	8	6	5	Biological sciences	4	6	8	9
Bachelor's degree	27	29	32	32		•	6	5	5
Graduate degree	24	25	37	41	Computer/information science	es 3	0	3	3
Graduate degree	24	23	31	41	Dublic cabacla mus dominada				
More students are getting	A ? a				Public schools predominate Public	070/	020/	010/	700/
	28%	39%	67%	74%		82%		81%	
A+, A, A- grade averages B grade averages		48			Nonpublic	18	17	19	21
C grade averages	53 18	13	31 2	25 1	111	520/	6407	5.01	E E O /
C grade averages	10	13	2	1	Women are in the majority	52%	54%	56%	55%
Crades are high in all subi		***							
Grades are high in all subj Arts and music			2 20	2.00					
	3.59	3.71	3.88	3.90					
English	3.08	3.23	3.59	3.66					
Foreign/classical languages	3.06	3.18	3.60	3.67					
Mathematics	2.90	3.03	3.45	3.54					
Natural sciences	2.99	3.17	3.55	3.63					
Social sciences/history	3.15	3.30	3.65	3.71					
Grade avg. in all subjects	3.08	3.24	3.67	3.75					

<sup>\*</sup> SAT data are based on high school seniors who took the SAT I: Reasoning Test prior to graduation in 1989 and 1999.

<sup>\*\*</sup>Data under "SAT+AP grades" pertain to all seniors who had both SAT scores and AP Exam grades in 1999 only. The first column (All) refers to all 339,260 seniors who had an SAT score and at least one AP Exam grade. The second column (3, 4 or 5) refers to the subgroup of 237,996 seniors whose AP Exam grades were high enough to qualify them for credit and/or enrollment in advanced courses at colleges throughout the nation.

Table 2: Average SAT scores of entering college classes, 1967-1999\*

	I	Male	Fe	emale		All
Year	Verbal	Math	Verbal	Math	Verbal	Math
1967	540	535	545	495	543	516
1968	541	533	543	497	543	516
1969	536	534	543	498	540	517
1970	536	531	538	493	537	512
1971	531	529	534	494	532	513
1972	531	527	529	489	530	509
1973	523	525	521	489	523	506
1974	524	524	520	488	521	505
1975	515	518	509	479	512	498
1976	511	520	508	475	509	497
1977	509	520	505	474	507	496
1978	511	517	503	474	507	494
1979	509	516	501	473	505	493
1980	506	515	498	473	502	492
1981	508	516	496	473	502	492
1982	509	516	499	473	504	493
1983	508	516	498	474	503	494
1984	511	518	498	478	504	497
1985	514	522	503	480	509	500
1986	515	523	504	479	509	500
1987	512	523	502	481	507	501
1988	512	521	499	483	505	501
1989	510	523	498	482	504	502
1990	505	521	496	483	500	501
1991	503	520	495	482	499	500
1992	504	521	496	484	500	501
1993	504	524	497	484	500	503
1994	501	523	497	487	499	504
1995	505	525	502	490	504	506
1996	507	527	503	492	505	508
1997	507	530	503	494	505	511
1998	509	531	502	496	505	512
1999	509	531	502	495	505	511

<sup>\*</sup>When the SAT was renormed in April 1995, mean scores were set at or near the midpoint of 500 of the 200-800 score scale, a process called recentering. All scores in this table reflect that process. Means after 1996 are recentered, and those for 1996 are based on recentered scores plus scores converted from the original to the new scale. Means for 1987-1995 were recomputed after individual scores were converted from the original to the new scale; means for 1972-1986 were converted to the new scale after a formula was applied to the original mean and standard deviation; and means before 1972 are based on estimates.

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Comparin	g or rankir	e 3:	SA	l ave	rages	D	/ Stat	e for	19	89 an	d 198	ed b	1999	lege Boa	ırd
Companii	<del></del>	iy states	T I		JI SAT SCO	7		mivanu a	nu s		IISCOUIA	ieu i		iege Boa	
	1989 V	M	╌┼	1996 V	М	-	1997 V	М	$\dashv$	1998 V	M	-	1999 V	M	% Grads Taking SAT
Alabama	556	539	<del>                                     </del>	565	558	+	561	555	-	562	558	-	561	555	9%
	1		$\vdash$			4			4						
Alaska	519	505		521	513	4	520	517	-	521	520		516	514 525	50%
Arizona	528	523	<del>!  </del>	525	521	-	523	522		525	528	-	524		34%
Arkansas	547	536		566	550	$\dashv$	567	558	_	568	555		563	556	6%
California	498	509		495	511	<del>-</del>	496	514	-		516		497	514 540	49% 32%
Colorado Connecticut	534	530 498	1-1	536	504	-	536	539	_	537 510	542		536	509	80%
Delaware	512	494	+	508	495	+	505			501	493		503	497	67%
D.C.	481	466	+ +	489	473		490	498 475	_	488	476	{	494	478	77%
Florida	497	494	+-+	498	496	-	499	499		500	501		499	498	53%
Georgia	479	475	+	484	477	+	486	481		486	482		487	482	63%
Hawaii	482	507	+	485	510	$\dashv$	483	512		483	513	-	482	513	52%
Idaho	541	523	<del>   </del>	543	536	+	544	539		545	544		542	540	16%
Illinois	537	539	+	564	575	$\dashv$	562	578		564	581		569	585	12%
Indiana	490	487	- 1	494	494		494	497		497	500		496	498	60%
!owa	: 585	585	<del></del>	590	600	+	589	601		593	601		594	598	5%
Kansas	1 569	561		579	571		578	575		582	585		578	576	9%
Kentucky	. 552	1 539	<del>-</del>	549	544		548	546		547	550		547	547	12%
Louisiana	549	534		559	550		560	553	-	562	558		561	558	8%
Maine	508	493		504	498		507	504		504	501		507	503	68%
Maryland	. 510	505		507	504		507	507		506	508		507	507	65%
Massachusetts	509	499	1	507	504		508	508	_	508	508	!	511	511	78%
Michigan	534	534	1	557	565		557	566	<u> </u>	558	569		557	565	11%
Minnesota	; 550	550	1	582	593		582	592	_	585	598	<del>!</del>	586	598	9%
Mississippi	547	536	<del>                                     </del>	569	557		567	551	-	562	549	1	563	548	4%
Missouri	546	538	<del>:</del>	570	569		567	568	-	570	573	<del>i -</del>	572	572	8%
Montana	545	542	1	546	547		545	548	-	543	546	i	545	546	21%
Nebraska	562	560	T	567	568		562	564	-	565	571	İ	568	571	8%
Nevada	516	512	1	508	507		508	509		510	513	İ	512	517	34% .
New Hampshire	524	510	1	520	514		521	518	i	523	520		520	518	72%
New Jersey	500	497		498	505		497	508	İ	497	508	Ī	498	510	80%
New Mexico	558	550	T	554	548		554	545		554	551	1	549	542	12%
New York	495	496	1	497	499		495	502		495	503	<del> </del>	495	502	76%
North Carolina	474	469		490	486	Γ	490	488	1	490	492		493	493	61%
North Dakota	574	581		596	599		588	595	T	590	599	1	594	605	5%
Ohio	528	520	i	536	535		535	536	1	536	540	1	534	538	25%
Oklahoma	554	542	1	566	557		568	560	T	568	564	1	567	560	8%
Oregon	519	509	1	523	521	1	525	524	i	528	528		525	525	53%
Pennsylvania	501	490		498	492		498	495		497	495		498	495	70%
Rhode Island	506	492		501	491		499	493		501	495		504	499	70%
South Carolina	476	469		480	474		479	474		478	473		479	475	61%
South Dakota	573	560		574	566		574	570		584	581	T	585	588	4%
Tennessee	561	542		563	552		564	556		564	557		559	553	13%
Texas	492	490		495	500		494	501		494	501		494	499	50%
Utah	572	555		583	575		576	570	L	572	570		570	568	5%
Vermont	512	497		506	500		508	502	1	508	504		514	506	70%
Virginia	507	498		507	496	_	506	497		507	499		508	499	65%
Washington	524	515	<u>-</u>	519	519		523	523	1	524	526		525	526	52%
West Virginia	525	515		526	506		524	508		525	513	1	527	512	18%
Wisconsin	553	554		577	586		579	590	L	581	594		584	595	7%
Wyoming	538	537		544	544		543	543		548	546		546	551	10%
National	504	502		505	508	}	505	511	1	505	512		505	511	43%

National 504 502 505 508 505 511 505 512 505 511 43%

Based on the projection of high school graduates in 1999 by the Western Interstate Commission for Higher Education, and number of students in the class of 1999 who took the SAT I: Reasoning Test. Updated projections in this column make it inappropriate to compare percentages for this year with those of previous years.

Table 4: SAT averages rose for all but two racial/ethnic groups between 1989 and 1999

			SAT Ve	rbal				SAT M	lath	
				Differ	ence				Differ	ence
	<u> 1989</u>	1998	1999	<u>1-vr</u> .	10-vr.	1989	<u>1998</u>	1999	<u>1-vr</u> .	10-st.
American Indian, Alaskan Native	462	480	484	4	22	461	483	481	(2)	20
Asian, Asian American, Pacific Islander	483	498	498	0	15	545	562	560	(2)	15
African American/Black	428	434	434	0	6	421	426	422	(4)	1
Mexican American	459	453	453	0	(6)	462	460	456	(4)	(6)
Puerto Rican	437	452	455	3	18	438	447	448	1	10
Hispanic/Latino	466	461	463	2	(3)	466	466	464	(2)	(2)
White	<b>52</b> 3	526	527	1	4	515	528	528	0	13
Other	490	511	511	0	21	493	514	513	(1)	20
All College-bound Seniors	504	505	505	0	1	502	512	511	(1)	9

Graph 5: On SAT, all racial/ethnic groups increased their average number of yearlong academic courses between 1989 and 1999

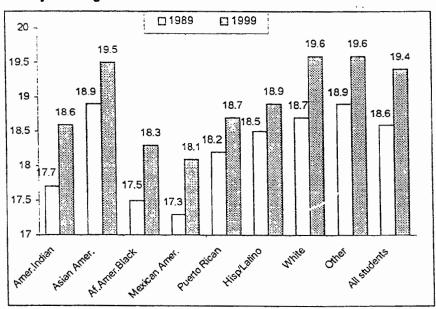


Table 6: Rising grades and falling scores may indicate grade inflation

National	More s	tudents	_		Falling S	SAT scores	
High School	with to	p grades	_	Vert	oal	Math	
Grade Averages	<u>1989</u>	<u>1999</u>	]	1989	1999	<u>1989</u>	<u> 1999</u>
A plus	4%	7%		623	613	631	627
A	11	16		580	569	585	580
A minus	13	16		552	541	556	551
В	53	48		493	483	490	485
C	18	13		441	429_	432	426



### 1999 California SAT I Report

Overview

8,228 365 365 365 367 177 177 377 177 387 38,130 2,368 511 513 (1)

Verbal C C Number Pr	State Change from Previous Year	Math Cl Number Pr	Change from Previous Year	Verbal Ch Number Pre	Change from Provious Year	Verbal	Change from Previous Year
23,590 (4/,955 48,915 22,622 8.025	1,473 3,508 3,508	473   28,088   172   173   1	1,105 3,478 3,478 937	200,142 3386,769 379,368 3160,343	8,013 (10,329) 17,490 (1,357)	23,590         1,473         28,088         1,105         200,142         8,013         217,984         5,537           24,1955         48,915         3,508         44,209         3,478         379,368         17,490         367,442         17,179           22,622         6003         11003         11,105,383         11,105,343         11,105         32,677         4,296           8,015         307         35,451         11,357         32,677         4,429         4,429	5,537 7,179 17,179 4,429

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700-800 600-699 500-599 400-499 300-399 146

Score Bands



Number of Test Takers by Gender, Ethnic Group, and GPA

		N	umber of Test 1	akers by Gend	er	, ,
	To	tai	Ma	ale	Fen	nale
	State	National	State	National	State	National
1995	127,364	1,067,993	58,320	496,016	69,044	571,977
1996	130,830	1,084,725	.59,871	504,598	70,959	580,127
Change from 1995	3,466	16,732	1,551	8,582	1,915	8,150
1997	134,750	1,127,021	60,942	520,338	73,808	606,683
Change from 1996	3,920	42,296	1,071	15,740	2,849	26,556
1998	142,139	1,172,779	64,782	541,962	17.57	630,817
Change from 1997	7,389	45,758	3,840	21,624	3,549	24,134
1999	151,636	1,220,130	68,475	562,911	83,161	657,219
Change from 1998	9,497	47,351	3,693	20,949	5,804	, 26,402
Change from 1995	24,272	152,137	10,155	66,895	14,117	85,242

				Num	ber of To	est Tak	ers by E	thnic G	roup			
	To	tal	America	n Indian	Asi	an	Bla	ck	Hisp	anic	Wh	ite
Į	State	National	State	National	State	National	State	National	State	National	State	National
1995	127,364	1,067,993	1,598	8,936	25,990	81,514	8,728	103,872	23,449	80,092	53,087	674,343
1996	130,830	1,084,725	1,520	8,737	27,357	84,319	9,175	106,573	23,586	81,985	54,601	681,053
Change from 1995	3,466	16,732	(78)	(199)	1,367	2,805	447	2,701	137	1,893	1,514	6,710
1997	134,750	1,127,021	1,539	10,677	28,405	89,236	9,010	110,462	24,183	86,068	<b>5</b> 5,069	693,736
Change from 1996	3,920	42,296	19	1,940	1,048	4,917	(165)	3,889	597	4,083	468	12,683
1998	142,139	1,172,779	1,415	10,159	29,889	94,066	8,868	114,912	25,589	-,90,412	56,217	704,462
Change from 1997	7,389	- 45,758	(124)	(518)	1,484	4,830	(142)	4,450	1,406	4.344	31,148	10,726
1999	151,536	1,220,130	1,294	8,261	30,859	96,108	9,455	119,394	27,236	94,667	58,166	717,632
Change iron 1998	9,497	47,351	(121)	(1,898)	970	2,042	587	4,482	1,647	4,255	1,949	13,170
Change from 1995	24,272	152,137	(304)	(675)	4,869	14,594	727	15,522	3,787	14,575	5,079	43,289

					Number	of Test	Takers	by GPA				
	A	+		1	A		E	3	(	;	D-	- F
	State	National	State	National	State	National	State	National	State	National	State	National i
1995	7,467	57,219	15,574	134,663	19,730	145,166	60,131	488,898	16,951	148,524	271	4,277
1996	7,921	60,219	16,339	142,784	20,819	-150,742	61,484	489,705	16,888	145,245	288	(4,303)
Change from 1995	454	3,000	765	8,121	1,089		£1,353	807	(63)	\$ (3,279)	<b>E</b> 17.	26
1997	8,403	65,768	17,212	151,637	21,688	159,680	62,165	495,974	16,566	143,142	251	4,506
Change from 1996	482	5,549	873	8,853	869	8,938	681	7,269	(322)	(2,103)	(37)	203
1998	8,855	<sub>~</sub> ,68,545	18,350	160,624	23,526	168,453	64,176	507,196	16,162	141,256	247	4,516
Change from 1997	452	2,777	1,138	8,987	1,838	8,773	2011	10,222	(404)	1,886)	是 (4)	:2500
1999	9,410	72,958	19,233	168,496	24,808	177,341	67,297	517,548	16,631	140,227	255	4,557
Change from 1998	555	4,413	883	7,872	1,282	8,888	3,121	10,352	469	(1,029)	8	41
Change from 1995	1,943	15,739	3,659	33,833	5,078	32,175	7,166	28,650	(320)	(8,297)	(16)	280



Number of Test Takers by Class Rank, Years of Study, and Family Income

				Nu	mber of	Test Tal	kers by (	Class Ra	ink			
	Top T	enth	Second	Tenth	Second	Fifth_	Third	Fifth	Fourth	Fifth	Lowes	t Fifth
	State	National	State	National	State	National	State	National	State	National	State	National
1995	22,098	186,980	25,718	192,356	30,401	236,247	23,606	206,054	3,584	36,456	794	7,885
1996	22,632	187,837	. 26,590	_195,323	31,678	240,190	24,073	206,401	3,496	35,976	744	7,569
Change from 1995	534	857	872	2,967	1,277	3,943	467	347	(88)	(480)	(50)	(216)
1997	23,115	192,995	27,408	202,986	31,502	244,931	24,257	209,781	3,581	36,533	831	7.869
Change from 1996	483	5,158	818	7,663	(176)	4,741	184	3,380	85	557	87	200
1998	23,894	196,563	28,161	207,146	33,476	255,634	25,279	218,142	3,635	37,505	786	7,969
Change from 1997	779	3,568	753	4,160	1,974	10,703	1,022	8.361	54	972	(45)	100
1999	24,974	203,494	29,611	213,532	34,492	261,637	26,368	223,732	3,715	38.249	826	8,082
Change from 1998	1,080	6.931	1,450	6,386	1,016	6,003	1,089	5,590	80	744	40	113
Change from 1995	2,876	16,514	3,893	21,176	4,091	25,390	2,762	17.678	131	1,793	32	197

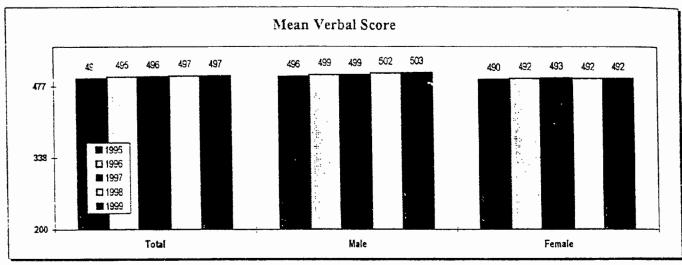
		Numb	er of Te	st Taker	s by Tot	al Years	of Stud	y in Six	Academ	ic Subje	cts **	
	20 or	more	19-	19.5	18-1	18.5	17-	17.5	16	16.5	Fewer t	han 16
	State	National	State	National	State	National	State	National	State	National	State	National
1995		-	-	-	-	-	-	-	-	_	-	-
1996				<u> </u>	-		\$	7.5	-	-	-	-
Change from 1995					100				-	-		
1997	33,834	381,141	16,489	123,649	15,515	112,481	12,207	85,515	9,008	65.248	20,424	125,905
C≥==== from 1996	33,834	381,141	16,489	123,649	15,515	112,481	12,207	85,515	9,008	65.248	20,424	126,905
1998	36,634	411,859	17,255	128,727	16,150	113,660	12,388	84,295	9,097	62,198	19,839	118,368
Change from 1997	2,800	30,718	766	5,078	635	1,179	181	(1,220)	89	(3,050)	(585)	(8,537)
1999	38,236	432,113	18,206	130,481	16,976	115,574	13,034	86,192	9,685	64,268	20,637	117,061
ටකලුදු from 1998	1,602	20,254	951	1,754	826	1,914	646	1,897	588	2,070	798	(1,307)
2995 most agrees		-		_	-	_	-			_	-	

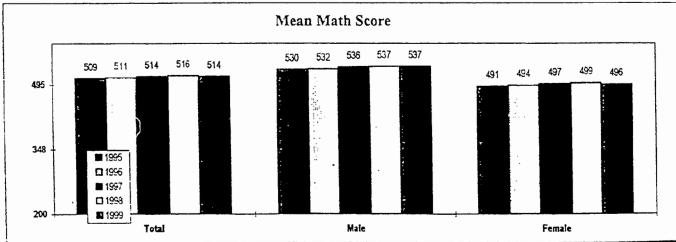
				Num	ber of To	est Take	rs by Fa	mily Inc	ome			
	\$70,000	or more	\$60-7	0,000	\$506	0,000	\$35-5	0,000	\$20-3	5,000	Less than	\$20,000
	State	National	State	National	State	National	State	National	State	National	State	National
1995	27,955	220,394	8,427	75,918	10,475	99,552	19,377 i	181,434	20,477	173,237	22,973	136,365
1996	30,419	239,712	8,823	×78,463	11,136	102,562	19,743	179,298	20,721	167,466	22,752	131,846
Change from 1995	2,464	19,318	396	2.545	661	3,010	366	(2,136)	244	(5,771)	⊆ ( <b>221</b> )	(4,519)
1997	32,521	261,081	8,859	80,402	11,236	105,452	19,507	178,554	20,809	164,639	22,469	130,842
Change from 1996	2,102	21,369	36	1,939	100	2.890	(236)	(744)	88	(2,827)	(283)	(1 004)
1998	35,597	283,147	9,180	84,139	11,372	105,403	19,440	175,357	20,563	161,685	.22,637	130,157
Change from 1997	3,076	22,066	321	3,737.	136	(49)	(67)	(3,197)	(146)	(2.954)	168	(685)
1939	38,260	307,511	9,638	86,152	11,269	104,512	19,356	170,823	20,927	156,143	22,708	125,511
Change from 1998	2,663	24,364	458	2,013	(103)	(891)	(84)	(4,534)	264	(5,542)	71	(4,645)
Change from 1995	10,305	87,117	1,211	10,234	794	4,960	(21)	(10,611)	450	(17,094)	(265)	(10,854)

<sup>\*\*</sup> A change in 1997 in the method of reporting Years of Study in Six Academic Subjects' prevents companisons with previous years using the same categorie



Mean Scores by Gender

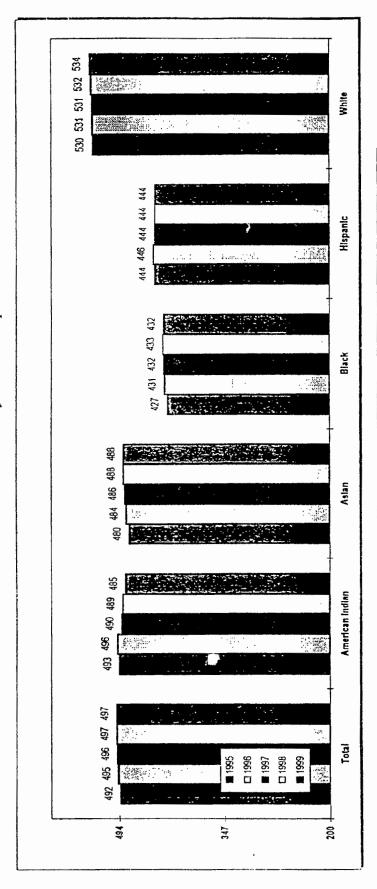




1		Mo	ean Ver	bal Sco	re			N	lean Ma	th Scor	е	
[	To	tal	Ma	ale	Ferr	nale	To	tal	Ma	ale	Fen	nale
	State	National	State	National	State	National	State	National	State	National	State	National
1995	492	504	496	505	490	502	509	506	530	525	491	490
1996	495	505	499	507	492	503	511	508	532	527	494	492
Change from 1995	3	1	3	2	2	1	2	2	2	2	3	2
1997	496	505	499	507	493	503	514	511	536	530	497	494
Change from 1996	1	-	_	_	1	_	3	3	4	3	3	2
1998	497	505	502	509	492	502	516	512	537	531	499	496
Change from 1997	1	-	3	2	(1)	(1)	2	1	1	1	2	2
1999	497	505	503	509	492	502	514	511	537	531	496	495
Change from 1998	~	-	1	_	_	-	(2)	(1)	_	_	(3)	(1)
Change from 1995	5	1	7	4	2	_	5	5	7	6	5	5



Mean Verbal Score by Ethnic Group

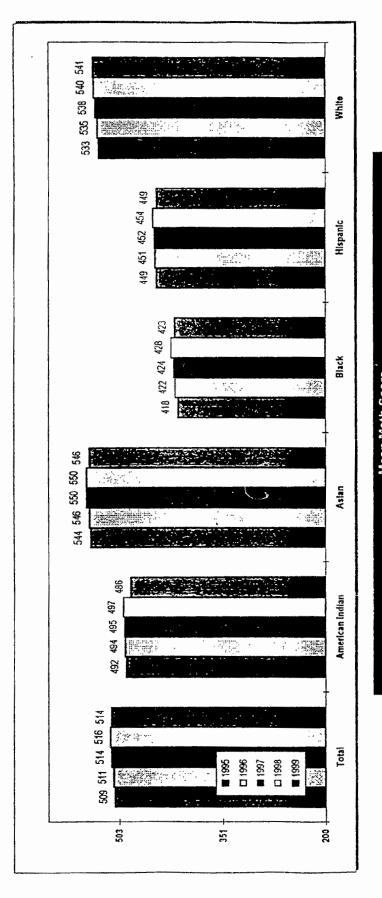


					M	ean Verl	Mean Verbal Score	re				
	L <sub>o</sub>	Total	America	American Indian	As	Asian	Black	ıck	Hisp	Hispanic	M	White
	State	National	State	National	State	National	State	National	State	National	State	National
1995	492	504	493	480	480	492	427	432	444	457	230	525
9661	495	505	496	483	484	496	431	434	446	458	531	526
Change from 1995	m	-	က	က	4	4	4	7	7	-	-	-
1997	496	505	490	475	486	496	432	434	#	457	531	526
Change from 1996	_	1	9	(8)	7	ı	-	t	8	Ξ	1	ı
1998	497	505	489	480	488	498	433	434	#	456	532	526
Change from 1997	-	1	<b>(1)</b>	5	2	2	1	1	1	(1)	-	1
1999	497	206	485	484	488	498	432	434	444	457	534	527
Change from 1998	'	s	€	4	1	ı	£	1	1	•	7	-
Change from 1995	S	-	(9)	4	8	9	5	2	-	1	4	2

15%



Mean Math Score by Ethnic Group



	Ţ	Total	America	American Indian	As	Asian Blac	Bla	Black	Hisp	Hispanic	M	White
	State	Nationsi	State	National	Sfate	National	State	National	Stale	National	State	National
1995	503	200	402	476	544	655	418	422	449	459	533	521
1996	511	508	494	477	546	558	422	422	451	459	535	523
Change from 1995	2	2	7	-	7	က	4	1	7	1	8	2
1997	514	511	495	475	220	260	424	423	452	460	538	526
Change from 1996	60	က	-	(2)	4	2	7	-	<b>~</b>	-	ო	6
1998	516	512	497	483	220	295	428	426	454	461	240	528
Change from 1997	2	-	2	ဆ	1	2	4	3	2	1	2	2
1999	514	511	486	481	546	260	423	422	449	458	541	528
Change from 1998	8	Ξ	3	(2)	₹	(2)	3	<del>(4)</del>	(2)	ල	•	1
Change from 1995	S	ည	(9)	വ	7	2	2	1	1	(1)	8	7
•												



Total

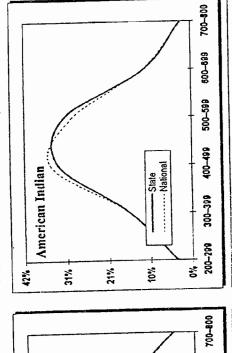
37%

28%

49%

### 1999 California SAT I Report

Verbal Score Distribution by Ethnic Group



889-009

500-598

657-007

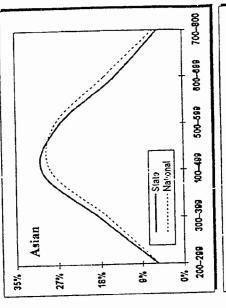
300-388

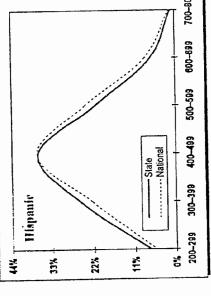
200-298

. 8

% 8 Black

34%





	700-800
	689-000
	400 499 500-599
Slate	2 I I
White	300~399
43% Wh	200-209

1	_	5
_	:	
•	-	4

	, and	-	American	Indian	Asi	-	Bis	×	Hispa	INIC	MA	
	2					Ī			10.0	Mational	Glete	National Contract
	Clete	National	State	National	State	National	Siate	National	Sidio	Maria	Olino.	
	Diaio					Ī		/00 0	706.7	703 1	200	2
000 000		700 Y	, Co/	2000	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	2	% 0.0	200	1.7.	2		
222-227		R O'T		2	-			-	1	200	20 00%	70 Y 01
000		707 37	44 00%	10 007	797	16.9%	6.0%	5.4%	\$	P.7.0	20.07	2 1.0
600-009		e 0		2.7.7	•			74.	/40 00	707 70	26 70%	36.36
000		24 707	22 48%	3000	, Y	27.30%	19.1%	19.4%	70.17	60.47	20.5	2
200-026		P   P   P	34.1/	2				200	1	27 C0/	20 20	20 80%
007 007		24 40	22 60	25 50		28.1%	37.3%	50.0%	5/4.75	60.70		20.03
4004		2	200	2				2000	75.00%	703 66	7.0%	α 5
000		707 C7	4K 8%	4608	%U K	16.1%	77.3%	70.0%	4.C.C7	20.77	2	;
2000		2		2				1 250	1 40	E 504	200	<b>4</b> 0%
טטר טטר	7007	7000	37%	3.7%	>9	5.4%	2.5%	6.5.	·	S.3.6		
667-007		4.00										

Verbal Score Distribution

700-800

669-009

500~599

400-489

300-388

200-299

155

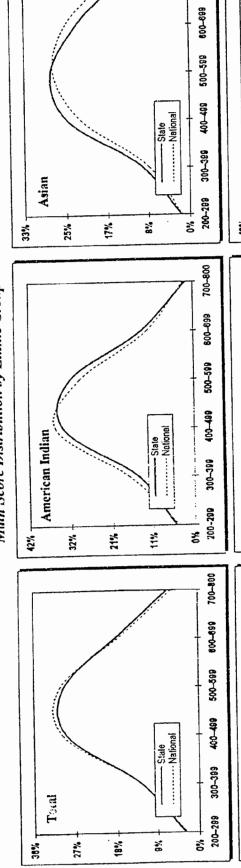
State State National

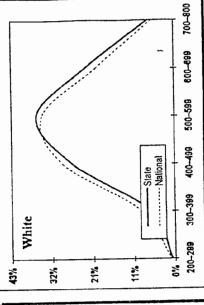
11%

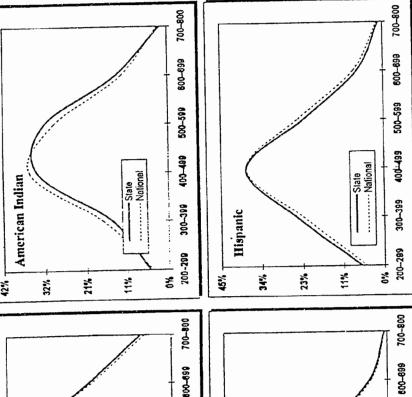
23%



Math Score Distribution by Ethnic Group







Black

33%

**1** 

22%

700-800

					Math	Math Score Distri	Distribu	tion				
	,	,	American India	n Indian	Aci	ue	Black	×	Hispanic	anic	*	White
		Oth	State	Mational	State	National	State	National	Slate	National	State	Nation
	Sigie	Kallonal	State	ומפונטו				i i	7 20	1 50/	£ 70/.	5 A
700 800	6 7%	6.8%	*5	2.4%	13.0%	15.4%	0.7%	8,0.0	1.2%	90.	•	9 6
000		7000	, , , , , , , , , , , , , , , , , , ,	74 0 067	22 70%	25 10%	7 Be%	4 4%	7.3%	8.3%	23.3%	20.5
669-009	18.5%	₹6./L	13.4%	Q.S.	77.77	23.12	2 1		100	707 70	36 40%	24.72
E00 500	20 8%	30 6%	31.8%	29.2%	28.2%	27.7%	17.6%	8,6'Q	77.77	24.1.9	20.1	5
200				760	74 80/	700 00	36 2%	37 2%	38.3%	38.3%	26.7%	29.2
400-499	29.2%	30.1%	33.6%	33.0%	×4.0/	22.073	2000	200	24 Fe/	709 66	%P 9	87
300-399	12.8%	12.9%	14.5%	16.9%	%9.6	8.2%	30.3%	60.15	64.37	22.0.2	7	
200 200	30%	2 7%	4 7%	3.9%	1.8%	1.6%	10.4%	9.3%	6.4%	5.1%	0.6%	-
2007	2											

157

500-599

400-499

300~388

200-299

%

State National

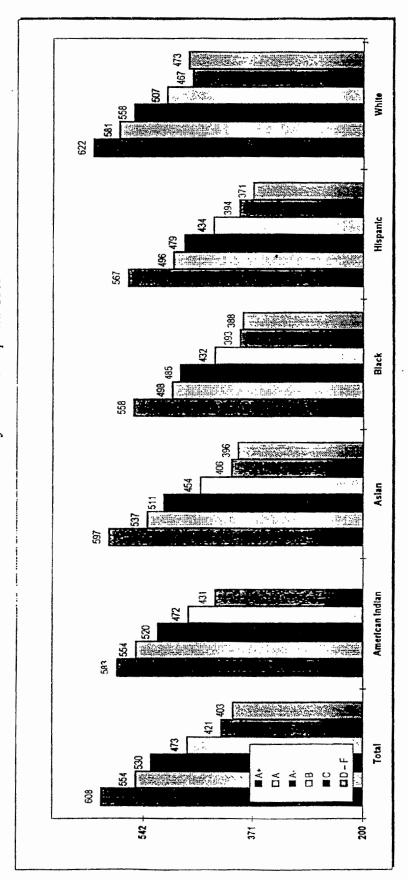
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158



Mean Verbal Score by Ethnic Group and GPA

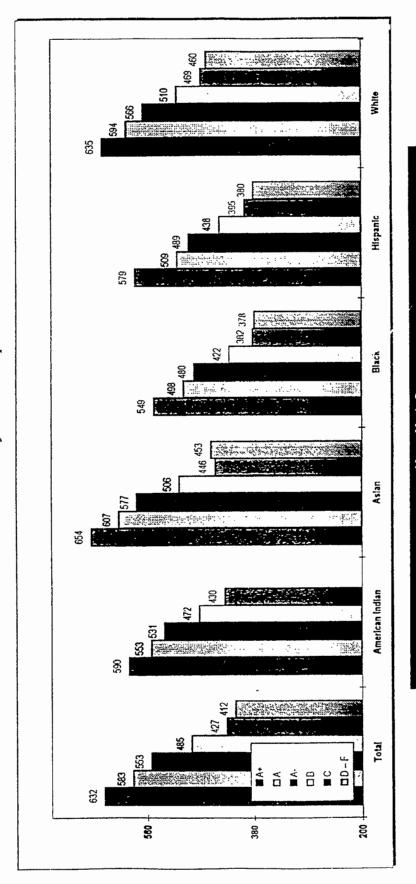


	White		2 620		_			
		State	622	284	558	204	467	473
	Hispanic	National	095	513	492	444	404	392
8	His	State	267	496	479	434	394	371
e	Black	National	544	Ē	483	432	394	379
verbai Score	Bi	State	558	498	485	432	393	388
viean ver	Asian	National	809	248	519	461	413	393
ivi	As	State	269	237	211	454	406	396
	n Indian	National	584	548	220	470	428	406
	American Indian	State	583	554	220	472	£	•
	<b>Total</b>	National	613	269	541	483	429	410
	ဌ	State	809	554	230	473	421	403

159

00844 0-F



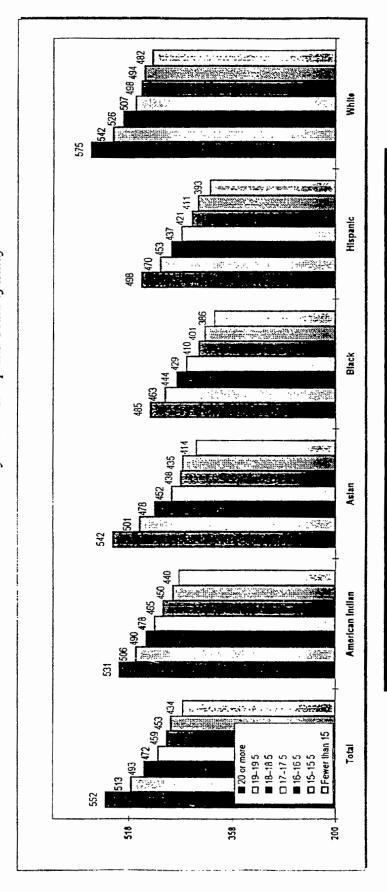


	Hispanic White	National State Na	572 635		498 566	443 510	401 469	387 460	
	<u> </u>	State	579	20	489	₩	395	ಹ	
,	īck	National	539	492	474	420	380	366	
200	Black	State	549	498	480	422	382	378	
Medil Math Scots	an	National	199	615	287	519	460	461	
	Asian	State	654	209	27.5	206	446	453	
	n Indian	National	583	549	522	467	422	405	
	America	State	290	553	531	472	65	'	
	12	National	627	280	551	485	426	408	
	Tota	State	632	583	553	485	427	412	
			<b>*</b>	<b>«</b>	ď	_ co	O	D - F	)

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Mean Verbal Score by Ethnic Group and Years of Study

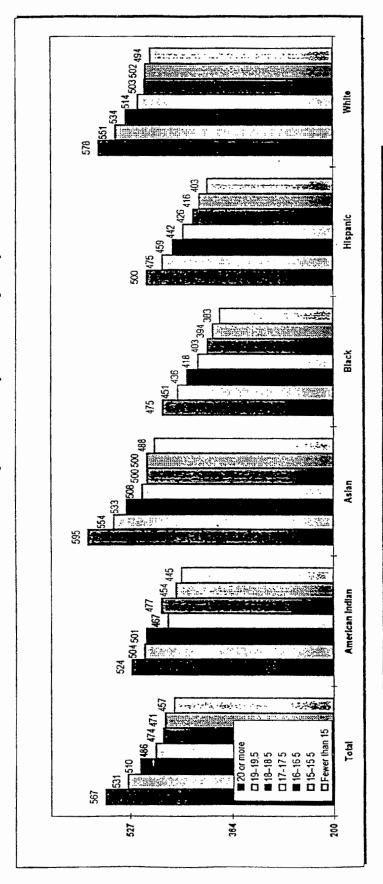


	To	Fotal	American Indian	n Indian	Asi	Asian	<b>18</b>	Black	Hisp	Hispanic	IM	White
	State	National	Slate	National	Siate	National	State	Nalional	State	National	State	National
20 or more	552	547	531	526	542	545	485	480	498	926	575	558
19–19.5	513	512	206	494	501	201	463	420	470	472	542	528
18-18.5	493	493	490	480	478	481	4	435	453	454	526	511
17-17.5	472	475	478	463	452	458	429	420	437	438	507	496
16–16.5	459	464	465	455	438	420	410	409	421	424	498	486
15-15.5	453	457	450	443	435	434	401	400	411	419	494	481
Fewer than 15	434	437	440	426	414	421	386	382	393	397	482	465

163



Mean Math Score by Ethnic Group and Years of Study

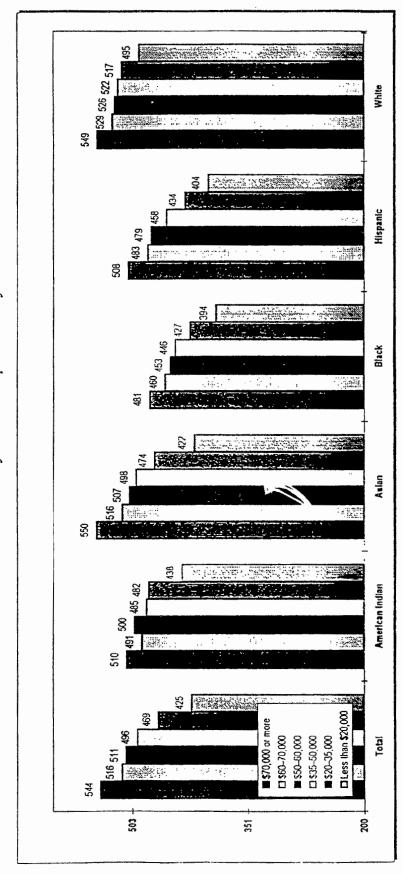


	မို	tal	America	n Indian	As	Aslan	Black	ıck	Hisp	anic	W	ite
	State	National	State	National	State	National	State	· National	State	National	State	Nationa
20 or more	267	920	524	617	595	599	475	465	200	499	878	558
19-19.5	531	510	204	493	554	656	451	438	475	472	551	234
18-18.5	510	439	\$	479	533	540	436	424	459	456	534	515
17-17.5	486	480	467	464	508	517	418	409	442	4	514	498
16-16,5	474	469	477	428	200	517	403	398	426	426	503	487
15-15.5	471	463	454	448	200	203	394	391	416	422	202	483
Fewer than 15	457	677	2	433	488	808	383	377	403	403	767	470

165



Mean Verbal Score by Ethnic Group and Family Income



	<b>T</b>	tal	America	n indian	As	Aslan	8	ıck	Hisp	anic	\$	White
	State	National	State	National	State	National	Siale	National	State	National	State	National
\$70,000 or more	544	545	510	509	220	226	481	483	208	516	549	548
\$60-70,000	516	220	491	493	516	527	450	462	483	492	529	526
\$50-60,000	511	514	8	496	207	516	453	457	479	482	526	521
\$35-50,000	496	8	485	486	498	20	446	447	458	470	522	513
\$20-35,000	469	481	482	-777	474	475	427	430	434	447	517	206
Less than \$20,000	425	441	438	444	422	430	394	403	404	416	495	492

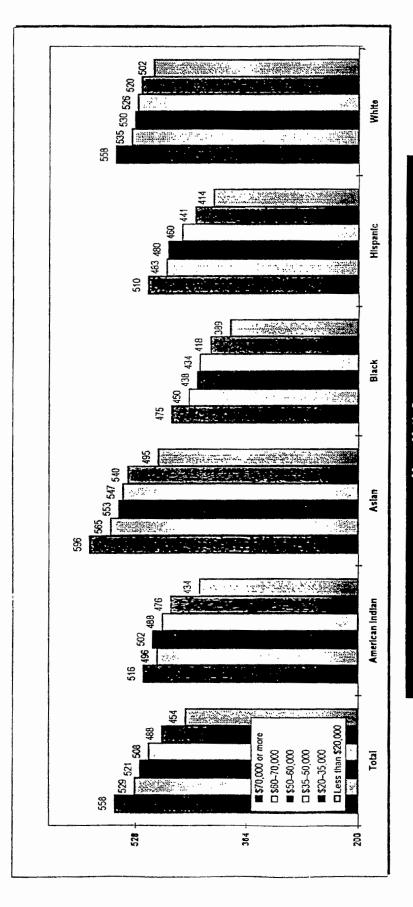
Mean Verbal Score

163

16/



Mean Math Score by Ethnic Group and Family Income



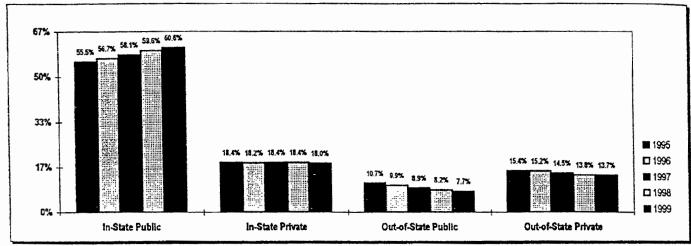
						2	Wean Math Scor	th Score	ć.				
		Ţ	<b>Total</b>	American Indian	n Indian	As	Aslan	Black	<del>S</del>	Hispanic	anic	<b>W</b> M	White
		State	National	State	National	State	Nalional	State	National	State	National	State	National
	\$70,000 or more	558	225	516	512	296	209	475	473	510	516	558	553
	\$60-70,000	529	523	496	493	265	574	450	448	483	492	535	527
	\$50-60,000	221	516	203	498	553	295	438	443	480	484	230	521
169	\$35-50,000	200	205	488	481	547	225	434	431	460	467	526	511
2 2	\$20-35,000	488	483	476	470	540	540	418	417	<del>1</del>	448	220	205
	Less than \$20,000	454	453	434	441	495	512	389	392	414	421	205	491

170

S.



Distribution of Scores Sent to Colleges



			In S	tate					Out of	State		
		Public			Private			Public			Private	
	Number	% Senders	% Non-White	Number	% Senders	% Non-White	Kumber	% Senders	% Non-White	Number	% Senders	% Han-White
1995	335,909	55.5%	60.4%	111,031	18.4%	58.3%	64,798	10.7%	38.6%	92,993	15.4%	47.5%
1996	365,079	56.7%	60.2%	116,989	18.2%	57.0%	64,077	9.9%	39.5%	97,852	15.2%	47.5%
Change from 1995	29,170	1.2%	(0.2%)	5,958	(0.2%)	(1.3%)	(721)	(0.8%)	0.9%	4,859	(0.2%)	-
<b>1</b> 997	378,378	58.1%	60.3%	119,956	18.4%	56 5%	58,037	8.9%	39.9%	94,552	14.5%	47.4%
Change from 1996	13,299	1.4%	0.1%	2,967	0.2%	(0.5%)	(6,040)	(1.0%)	0.4%	(3,300)	(0.7%)	(0.1%)
1998	401,443	59.6%	50.2%	123,794	18.4%	56.2%	55,185	8.2%	41.2%	92,687	13.8%	47.3%
Change from 1997	23,065	1.5%	(0.1%)	3,838	-	(0.3%)	(2,852)	(0.7%)	1.3%	(1,865)	(0.7%)	(0.1%)
1999	419,329	60.6%	52.0¥	124,355	18.0%	54.0%	53,134	7.7%	41.7%	94,713	13.7%	45.8%
Change from 1998	17,886	1.0%	(1,4%)	561	(0 4%)	(2.2%)	(2,051)	(0.5%)	0.5%	2,026	(0.1%)	(1.5%)
Change from 1995	83,420	5.1%	(1.5%)	13,324	(0.4%)	(4.3%)	(11,664)	(3.0%)	3.1%	1,720	(1.7%)	(1.7%)

### Colleges receiving the highest number of SAT Scores

	Public			Private	
Name	Number	% Senders	Name	Number	% Senders
U Calif Los Angeies	43,883	34.4%	U Southern Calif	22,078	17,3%
U Calif San Diego	39,395	30.9%	Stanford U	14,610	11.4%
U Calif Berkeley	34,069	26.7%	U San Diego	10,792	8.5%
U Calif Santa Barb	31,548	24.7%	Loyola Marymount U	6,574	5.1%
U Calif Davis	28,674	22.5%	Pepperdine U	6,426	5.0%
U Calif Irvine	27,580	21.6%	U San Francisco	6,055	4.7%
San Diego SU	22,161	17.4%	Santa Clara U	5,597	4.4%
U Calif Santa Cruz	17,307	13.6%	New York U	4,984	3.9%
Cal SU Long Beach	17,209	13.5%	Harvard/Radcliffe C	3,811	3.0%
U Calif Riverside	16,761	13.1%	U Pacific	3,579	2.8%
Cal Poly SU San Luis	16,678	13.1%	Boston U	3,387	2.7%
Cal SU Fullerion	10,152	8.0%	Cal Inst Tec	3,202	2.5%
San Jose SU	9,720	7.6%	St Mary's C Celif	3,020	2.4%
San Fran SU	9,680	7.6%	Azusa Pacific U	2,900	2.3%
Cal State Poly U Pom	8,643	6.8%	Princeton U	2,746	2.2%
Cal SU Northridge	8,624	6.8%	Yale U	2,716	2.1%
Cal SU Los Angeles	8,039	6.3%	Pomona C	2,552	2.0%
Cal SU Chico	6,949	5.4%	Chapman U	2,535	2.0%
Cal SU Sacramento	6,676	5.2%	Brown U	2,522	2.0%
Cal SU Fresno	6,049	4.7%	Northwestern U	2,456	1.9%



Average Years of Study in Academic Subject by Gender and Ethnic Group

-						Ī	q	Samuel		Jaom	Amorican Indian	Man	4	4sian		B	Black		HIN	Hispanic		141	iite	
		t oral			MINE	Î			ĺ		ŀ	_			ř	,,,,	Moon	r	4110	Mean	_	Ave	Mean	
	400	Mean		Avo	Mean		AVR	Mean	#L	Avg S	Mean		Avg	wean	-	846		-	9		_	٥.		:
1.0	2 2		_	8	7	2	, , ,	4	7	Yrs	7	¥	Yrs	~	¥	Yrs	~	Z	7.2		¥	2		2
Arts and Music  L.7 498 514 1.5 504 537 1.8 493  Foreign & Classical Languages 2.8 498 514 3.6 504 537 3.8 2.8 494  Mathematics C. C. C. C. C. C. C. C. C. C. C. C. C.	1.7 3.8 33.6 3.0	1.7         498         514         1.5         504         537           2.8         498         514         3.8         504         537           2.8         498         515         2.7         505         538           3.6         498         514         3.6         504         537           3.0         499         516         3.0         505         539           3.0         499         516         3.0         505         539           3.0         498         535         326         538         538	514 515 516 516	1.5 2.7 2.7 3.0 3.0	504 505 505 504 505	537 538 538 537 539 539	1.8 3.8 3.6 3.0	493 497 494 497 493 496 494 498 494 498	497 496 497 496 498 498	3.5 5 5 5 5 3 5 5 5 5 5 5 5 5 5 5 5 5 5	48 48 48 48 48 48	486 (485 5 487 5 486 5 487 5 487	1.6 488 546 3.8 488 546 2.9 489 546 3.7 488 545 3.2 489 547 [3.1] 488 546	488 488 489 489 489 489	546 546 546 545 547	1.6         488         546         1.5         432         424         1.4         444         450           3.8.         488         546         3.8         424         429         449         449           2.9         489         546         2.5         434         425         2.6         445         450           3.7         488         545         3.5         433         424         356         444         450           3.2         489         547         2.8         434         425         2.8         446         451           3.1         488         5546         5118         433         4254         5318         445         451           3.1         488         5546         5318         433         4254         5318         445         451	433 434 434 433 433 433	424 425 425 424 425 425 425	424         1.4         444         450           424         3.8         444         449           425         2.6         445         450           425         3.6         444         450           425         2.8         446         451           425         2.8         446         451           424         33.11         4455         450	444 445 445 446 446 446		1.8 535 541 3.8 534 541 2.8 535 541 3.6 535, 541 3.1 535 542 5331 535 641	535 534 535 535 535 535	541 541 541 542 542
	101	18 1 408 515 178 514 537 18.2 493 497 17.7 486 486 18.3 488 546 17.2 433 424 17.3 445 450 18.4 535	515	17.8	504	537	18.2	493	497	17.7	486	486	18.3	488	546	17.2	433	124	17.3	145	450	8.4	335	541
Total of All Subjects	01	122	2																					

# Grade Point Average in Academic Subject by Gender and Ethnic Group

Subject         OrA         V         M         GrA         V         V	Trunt         Macen         Akean         Akean <th< th=""><th>Mean V V V 498 S 499 S 499 S 499 S 499 S 499 S 498 S 498 S 498 S 498 S 498 S 498 S 498 S 498 S 498 S 5</th><th>7</th><th>3.19 3.19 3.19 3.19 3.19</th><th>Mean Mean 202 5 503 5503 5503 5503 5503 5503 5503</th><th>534 536 536 537 537 537</th><th>3.78 3.40 3.33 3.01 3.21 3.34 3.30 3.30</th><th>Alean 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</th><th>M C C 3 3 9 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9</th><th>3.11 3.11 3.33</th><th>  The putality   The</th><th>M G G S S S S S S S S S S S S S S S S S</th><th>ANIMIA MA PA V 78 488 38 488 39 490 29 489 45 488</th><th>Mean Alean A</th><th>45 2 2 3 3 0</th><th>MM</th><th>Mean Mean M 42 42 42 42 42 42 42 42 42 42 42 42 42</th><th>GFA 3 3113 6 3.29 6 3.29 6 3.29 6 3.29 6 3.29 7 3.00 7 3.00 7 3.00 7 3.00</th><th>Mean Mean Mean Mean Mean Mean Mean Mean</th><th>Mean Mean M</th><th>6 9 3 3 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8</th><th>Mean         Mean           V         M         GPA         V         M           445         448         3.80         535         539           444         349         340         584         541           445         450         3.23         535         542           444         449         3.15         534         541           444         450         3.30         535         541           444         450         3.36         534         541           444         450         3.36         535         541           444         450         3.36         534         541           444         450         3.36         534         541</th><th>Mean Mean Mean Mean Mean Mean Mean Mean</th><th></th></th<>	Mean V V V 498 S 499 S 499 S 499 S 499 S 499 S 498 S 498 S 498 S 498 S 498 S 498 S 498 S 498 S 498 S 5	7	3.19 3.19 3.19 3.19 3.19	Mean Mean 202 5 503 5503 5503 5503 5503 5503 5503	534 536 536 537 537 537	3.78 3.40 3.33 3.01 3.21 3.34 3.30 3.30	Alean 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	M C C 3 3 9 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9	3.11 3.11 3.33	The putality   The	M G G S S S S S S S S S S S S S S S S S	ANIMIA MA PA V 78 488 38 488 39 490 29 489 45 488	Mean Alean A	45 2 2 3 3 0	MM	Mean Mean M 42 42 42 42 42 42 42 42 42 42 42 42 42	GFA 3 3113 6 3.29 6 3.29 6 3.29 6 3.29 6 3.29 7 3.00 7 3.00 7 3.00 7 3.00	Mean Mean Mean Mean Mean Mean Mean Mean	Mean Mean M	6 9 3 3 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Mean         Mean           V         M         GPA         V         M           445         448         3.80         535         539           444         349         340         584         541           445         450         3.23         535         542           444         449         3.15         534         541           444         450         3.30         535         541           444         450         3.36         534         541           444         450         3.36         535         541           444         450         3.36         534         541           444         450         3.36         534         541	Mean Mean Mean Mean Mean Mean Mean Mean	
Total of All Subjects	3.27 497 514 3.21 503 537 3.33 493 496 3.14 485 486 3.38 485 346 2.31 433 433 421 3.11 3.31	497	514	3.21	503	537	3.33	493	196	2.14	485	200	28	20	7 0	-	2							ר

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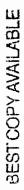


Trends in Average Years of Study by Gender and Ethnic Group

Subject         Formule         Affalle         Formule         Affalle         Affalle         Formule         Formule         Affalle         Affalle         Formule         Affalle         Affalle <t< th=""><th>70111 1.6 1.997 1.6 1.6 1.6 1.3 1.6 1.3 1.6 1.3 1.5 1.3 1.5 1.3 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5</th><th>Total         Afaile         Female         American Indian         Asian           1999         1997</th></t<> <th>1999 1.5 2.7 2.7 3.6 3.0</th> <th>Male 1.5 2.7 2.7 3.8 3.0 3.0 3.22</th> <th>1.5 1.5 3.8 2.6 5.3.6 3.0</th> <th>1999 1.8 2.8 3.6 3.0 3.0</th> <th>Penule 1997 1.7 1.3.8 2.8 3.0 3.0</th> <th>7.1.7 7.3.8 7.2.8 7.2.9 7.3.6 7.3.6 7.3.6 7.3.6 7.3.6</th> <th>3.2.5</th> <th>American Indian 1999 1997 1995 1.8 1.7 1.7 2.3 2.6 2.6 2.5 2.6 2.6 3.5 3.5 3.6 3.6 2.9 2.9 2.8 2.9 2.9 2.8 2.9 2.9 2.8</th> <th>2.6 2.6 2.8 2.3 3.6 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8</th> <th>25.5 3.7 3.7 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1</th> <th>Astan 1997 199 1.5 1 2.9 2 2.9 2 3.7 33 3.2 3 3.2 3</th> <th>2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2</th> <th>Bluck 997 1997 1.5 1.5 2.4 2.4 5. 2.4 5. 2.7 5. 2.7 5. 2.7 5. 2.7</th> <th>Female         Annerican Indian         Asian         Black         Hispanic         Wille           15         1.8         1.7         1.7         1.8         1.7         1.7         1.6         1.5         1.7         1.4         1.4         1.4         1.8         1.7         1.7         1.6         1.5&lt;</th> <th>1999 1.4 1.4 2.6 1.3.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1</th> <th>Hispaniic 1999 1997 1995 1.4 1.4 1.4 2.6 2.7 2.6 13.6 23.6 23.5 13.6 23.6 23.5 2.8 2.8 2.7 2.8 2.8 2.7 13.8 23.8 2.7 2.8 2.8 2.7 13.8 23.8 23.6 23.5 13.8 23.8 2.7 2.6 23.5 13.8 2.8 2.7 2.6 2.7 2.6 2.7 2.6 2.7 2.6 2.7 2.6 2.7 2.6 2.7 2.6 2.7 2.7 2.7 2.7 2.7 2.7 2.7 2.7 2.7 2.7</th> <th>1.4 1.4 2.6 2.7 2.7 2.7</th> <th>1999 1997 1995 1.8 1.8 1.7 (3.38 3.8 3.8 2.8 2.8 2.8 3.6 3.6 3.6 3.1 3.0 3.0 (3.33 3.33 3.32</th> <th>1997 1.8 1.8 2.8 3.6 3.0 3.0</th> <th>1995 1.7 2.8 3.6 3.0 3.0 3.0</th> <th></th>	70111 1.6 1.997 1.6 1.6 1.6 1.3 1.6 1.3 1.6 1.3 1.5 1.3 1.5 1.3 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	Total         Afaile         Female         American Indian         Asian           1999         1997	1999 1.5 2.7 2.7 3.6 3.0	Male 1.5 2.7 2.7 3.8 3.0 3.0 3.22	1.5 1.5 3.8 2.6 5.3.6 3.0	1999 1.8 2.8 3.6 3.0 3.0	Penule 1997 1.7 1.3.8 2.8 3.0 3.0	7.1.7 7.3.8 7.2.8 7.2.9 7.3.6 7.3.6 7.3.6 7.3.6 7.3.6	3.2.5	American Indian 1999 1997 1995 1.8 1.7 1.7 2.3 2.6 2.6 2.5 2.6 2.6 3.5 3.5 3.6 3.6 2.9 2.9 2.8 2.9 2.9 2.8 2.9 2.9 2.8	2.6 2.6 2.8 2.3 3.6 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8	25.5 3.7 3.7 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1	Astan 1997 199 1.5 1 2.9 2 2.9 2 3.7 33 3.2 3 3.2 3	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Bluck 997 1997 1.5 1.5 2.4 2.4 5. 2.4 5. 2.7 5. 2.7 5. 2.7 5. 2.7	Female         Annerican Indian         Asian         Black         Hispanic         Wille           15         1.8         1.7         1.7         1.8         1.7         1.7         1.6         1.5         1.7         1.4         1.4         1.4         1.8         1.7         1.7         1.6         1.5<	1999 1.4 1.4 2.6 1.3.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1	Hispaniic 1999 1997 1995 1.4 1.4 1.4 2.6 2.7 2.6 13.6 23.6 23.5 13.6 23.6 23.5 2.8 2.8 2.7 2.8 2.8 2.7 13.8 23.8 2.7 2.8 2.8 2.7 13.8 23.8 23.6 23.5 13.8 23.8 2.7 2.6 23.5 13.8 2.8 2.7 2.6 2.7 2.6 2.7 2.6 2.7 2.6 2.7 2.6 2.7 2.6 2.7 2.6 2.7 2.7 2.7 2.7 2.7 2.7 2.7 2.7 2.7 2.7	1.4 1.4 2.6 2.7 2.7 2.7	1999 1997 1995 1.8 1.8 1.7 (3.38 3.8 3.8 2.8 2.8 2.8 3.6 3.6 3.6 3.1 3.0 3.0 (3.33 3.33 3.32	1997 1.8 1.8 2.8 3.6 3.0 3.0	1995 1.7 2.8 3.6 3.0 3.0 3.0	
000	.1 17	18.1 17.9 17.7 17.8 17.8 17.6 18.2 18.1 18.0 17.7 17.7 17.7 18.3 18.3 18.0 17.2 16.9 16.8 17.3 17.4 17.0 16.4 16.5 16.5	7 17.8	17.8	17.6	18.2	18.1	18.0	17.7	1.7	7.7	8.3	8.3 18	0.1	7 16	9 16.	2 17.3	17.4	?/-	10.4	10.2		
.1																							

## Trends in Grade Point Average by Gender and Ethnic Group

	295	T	42 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2	6	
White	1 266	2661 6661 6661 6661 6661 6661 6661 6661	3.73         3.72         3.68         3.67         3.66         3.62         3.78         3.77         3.78         3.77         3.78         3.77         3.78         3.79         3.74         3.75         3.49         3.49         3.49         3.49         3.49         3.58         3.54         3.80         3.79         3.79         3.77         3.78         3.70         3.71         3.78         3.77         3.79         3.79         3.71         3.22         3.30         3.00         3.01         3.39         3.37         3.36         2.81         2.77         2.74         3.29         3.28         3.25         3.27         3.10         3.17         3.12         3.11         3.40         3.38         3.36         3.17         3.17         3.17         3.10         3.30         3.31         3.21         3.21         3.21         3.21         3.21         3.21         3.21         3.21         3.22         3.23         2.59         2.59         2.59         2.90         2.90         2.90         2.90         2.90         2.90         2.90         2.90         2.90         2.90         2.90         2.90         2.29         2.81         3.28         2.80         2.80 <th< td=""><td>3.27 3.25 3.22 3.21 3.19 3.16 3.33 3.30 3.27 3.14 3.13 3.15 3.38 3.37 3.36 2.91 2.86 2.84 3.11 3.09 3.06 3.36 3.33 3.29</td><td></td></th<>	3.27 3.25 3.22 3.21 3.19 3.16 3.33 3.30 3.27 3.14 3.13 3.15 3.38 3.37 3.36 2.91 2.86 2.84 3.11 3.09 3.06 3.36 3.33 3.29	
18	1 666		23 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4	.36	
	1 500		25 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	.06	
Hispanic	1 200	+	.58 3 .12 3 .80 2 .80 2 .98 2	3.09	
His	000		1.60 3 1.13 3 1.29 3 1.20 2 3.00 2	3.11	
	3007		2.74 2.80 2.80	2.84	
Bluck	1001		3.49 3.00 2.77 2.58 2.83 3.03	2.86	
H	0003		3.51 3.03 2.81 2.59 2.87 3.07£	2.91	
	3001	2	3.75 3.36 3.23 3.29 3.29 3.43	3.36	
Asian		1861	3.77 3.37 3.37 3.22 3.30	3.37	
		1999	3.78 3.38 3.39 3.21 3.29 3.45	3.38	
Amorieun Indlan		1995	3.68 3.22 3.01 2.91 3.10 3.29	3.15	
l and		1997	3.71 3.17 3.03 2.92 3.13 3.26	3.13	
Amor		1999	3.70 3.06 2.90 3.11 3.33	3.14	
		1995	3.73 3.37 3.28 2.99 3.17	3.27	
Commito		1997	3.76 3.39 3.31 3.01 3.19 3.38	3.30	
		1999	3.78	3.33	
		1995	3.62 3.08 3.08 3.05 3.15	3.16	
	Mule	1997	3.66 3.18 3.17 3.17	3.19	
		7661 6661 1995 1999 1997	3.19 3.19 3.19 3.19 3.33	3.21	
		1995	3.68 3.19 3.10 3.16 3.34	3.22	
	Total	1997	3.72 3.22 3.04 3.18 3.18	3.25	
		6661	3.73 3.25 3.05 3.20 3.38	3.27	
		**************************************	Arts and Music  3.73 3.72 3.68 3.67 3.66 3.62 3.78 3.76 3.71 3.68 3.77 3.75 3.51 3.49 3.44 3.60 3.58 3.54 3.80 3.79 3.75  Englishized Resistant Languages 3.25 3.22 3.19 3.14 3.11 3.08 3.31 3.22 3.31 3.22 3.32 3.32 3.32 3.32	Total of All Subjects	total of All Subjects





The College Board

Intended College Major by Gender

		Total			Male			Female	
College Major	Number	Mean V .	Mean M	Number	Mean V	Mean M	Number	Mean V	Mean M
Agriculture/Natural Resources	1,756	493	493	669	476	496	1,057	504	492
Architecture/Environmental Design	3,296	478	518	1,920	469	520	1,376	491	516
Arts: Visual & Performing	10,287	507	505	4,118	208	514	6,169	505	494
Biological & Life Sciences	8,409	533	547	3,039	542	570	5,370	528	535
Business & Commerce, Communications	17,877	481	512 \$300	8,621	492 \$1,505.50	531	9,256	470	493
Computer/Information Sciences	7,852	492	537	6,253	502	549	1,599	450	487
Education	9,233	468	473	1,799	472	492	7,434	467	468
Engineering	11,155	\$08	564	9,043	507	999	2,112	511	557
Foreign/Classical Languages	617	507	209	206	494	514	. 411	514	203
General/Interdisciplinary	355	553 8.2.485335	540 \$27504	121	534 F 1504	551 315 543	234	563	535
Home Economics	441	451	464	901	460	489	335	448	456
Language & Literature	2,126	290	539	809	597	557	1,518	587	532
Library & Archival Sciences	44	494	522	. 20	468	548	24	516	200
Mathematics	747	545	628	424	545	633	323	545	621
Military Sciences Philosophy/Religion/Theology/	597	506	517	481	509	524	116	492	486
Physical Sciences	1,680	562	588	985	571	909	695	550	564
Public Affairs & Services	3,341	438	446	1,673	443	461	1,668	434	430
Social Sciences & History	14,249	518	505	4,129	541	540	10,120	\$00	491
Technical & Vocational Undecided St. W. W. W. St. St. St. St. St. St. St. St. St. St	809 84210,174	433	449	514 (274,937)	440	465	295 77.5.237	421	420



Intended College Major by Ethnic Group

	T	Total		American Indian	an In	dian	Ч	Asian		B	Black		His	Hispanic		1,	White	
College Major	Number	New V	NewM	Number	Akun P	Akwihi	Number	Lkon V	hkan M	Number	Akan V	A&wn Bf	Number	hkwi V	KeenM	Number	Akun V	Akwihi
Agriculture/Natural Resources	1,756	493	493	32	504	480	128	461	519	57	422	405	241	440	434	1,162	808	909
Architecture/Environmental Design	3,296	478	\$18	40	461	497	623	466	550	191	426	440	839	429	194	1,387	514	546
Arts: Visual & Performing	10,287	507	502	103	503	477	1,756	472	519	587	431	409	1,708	450	440	5,113	. 541	\$25
Biological & Life Sciences	8,409	. 533	547	87	514	808	2,050	534	586	442	463	454	1,264	476	476	3,663	928	900
Business & Commerce Communications 28 25 15 25 15 15 15 15 15 15 15 15 15 15 15 15 15	17,877	1877 481 512 14898 15148 1550	512 5005	138	470	487	4,734	471	540 25295	1,427	428	427	3,468	436	443	6,768	519 2542	541 527 <u>6</u>
Computer/Information Sciences	7,852	492	537	54	499	514	3,193	473	548	464	430	430	1,139	433	453	2,311	554	185
Education	9,233	468	473	102	458	453	1,052	446	492	205	402	395	2,258	420	422	4,726	501	201
Engincering	11,155	808	564	88	508	546	3,475	489	576	809	444	463	2,104	457	\$02	4,107	555	109
Foreign/Classical Languages	617	507	509	6	ı	1	110	480	531	32	430	407	156	432	439	257	56-1	\$51
General/Interdisciplinary	355	553	540	3. (190)	1,463	- \$4691	42 (4) 6(073)	525 6.4903	572 \$5362	17	459	432	42	482	474 6445	215	574 S17	555 75293
Home Economics	441	451	464	_	:	ı	16	442	496	15	382	377	87	410	415	175	496	200
Language & Literature	2,126	200	539	15	5.88	504	260	575	858	121	105	446	287	534	482	1,208	612	555
Libra.y & Archival Sciences	44	494	522	٠.	ı	'	12	452	548	4	1	ı	9	335	387	50	577	573
Mathematics	747	345	628	ν,	558	280	144	511	650	24	470	538	142	499	\$95	368	575	648
Military Sciences Philosophy/Religion/Theology	597	506 548	517	13	497	495 ( <b>582</b> )	96	96 478 03 \$527	517 559	19	. 16 2452	462	198	450	449	309 FUR 424	537	543 : 551
Physical Sciences	1,680	\$62	588	=	559	510	172	533	612	69	481	486	224	464	505	945	685	809
Public Affairs & Scrvices	3,341	438	446	39	457	451	341	435	473	284	400	390	1,250	399	405	1,192	487	492
Social Sciences & History	14,249	518	\$0\$	≆	105	-18.3	2,013	818	541	1,255	453	423	3,369	467	449	6,097	\$88	537
Technical & Vocational	809 433 (417) 8605 (410) 174 \$ 5078	433 \$5078	449	10	167	467 458 (\$302) \$19149	145 (4/2,200)	411 2,5062	457	58 20005	370	361	219	386 \$442;	398 27449	324	480	4901



### 1999 SAT I Summary Report All States by Gender

		Total			Male		•	Female	
	Number	Mean V	Mean M	Number	Mean V	Mean M	Number	Mean V	Mean M
Alabama	4,064	195	555	1,825	570	579	2,239	555	535
Alaska	3,558	516	514	1,606	519	532	1,952	513	499
Arizona	13,144	524	525	6,071	528	545	7,073	521	208
Arkansas	1,599	563	929	747	57.1	579	852	555	535
California	3,151,636	497	514	. 68,475	503	537	83,161	492	496
Colorado	13,062;	536	540	6,103	540	1, 360	6,959	53315	E23
Connecticut	28,044	510	809	13,476	511	525	14,568	809	493
Delaware	5,518	503	497	2,529	809	517	2,989	498	480
D.C.	2,884	464	478	1,290	512	208	1,594	479	454
Florida	62,524	499	498	28,280	200	515	34,244	498	484
Georgia	49,357	487	482;	21,867	490	499	27,490	. 484	. 469
Hawaiil Charles Control	7,265	482	513	3,229	484 94	529	4,036	7.18481	\$ 500
Idaho	2,679	542	540	1,222	544	999	1,457	541	522
Illinois	16,220	695	585	7,692	575	209	8,528	564	564
Indiana	39,267	496	498	17,809	200	518	21,458	492	481
Iowa	1,873	594	868	898	109	621	1,005	588	578
Kansas Kentucky	2,686	578	576	1,248	577 \$10 553	589 564 567	1,438	578 542	, 565 1785 530
Louisiana	3,777	198	828	1,653	269	285	2,124	555	540
Maine	10,356	20.7	\$03	4,741	210	521	5,615	504	488
Maryland	35,819	20.7	507	16,270	512	526	19,549	504	491
Massachusetts	48,685	511	511	23,008	515	530	25,677	507	493
Michigan and Control of the Control	11,489	557	595	5,272	266	290	6,217	550	545
Minnesota	18,494	286日	5.88	2,553	¥.	62013	4(2/941)	SE 283	24.578 E.
Mississippi	1,227	563	548	521	572	574	200	256	529
Missouri	4,870	572	572	2,430	575	290	2,440	268	554
Montana	2,543	545	546	1,162	548	565	1,381	543	529



### 1999 SAT I Summary Report All States by Gender

		Total	* * * * * * * * * * * * * * * * * * * *		Male			Female	
	Number	Mean V	Mean M	Number	Mean V	Mean M	Number	Mean V	Mean M
Nebraska	906'1	899	571	822	570	595	1,084	999	553
Nevada	4,561	512	517	2,018	517	537	2,543	509	200
New Hampshire	10,227	520	518	4,762	523	537	5,465	517	201
New Jersey	65,358	498	510	31,154	. 205	528	34,204	495	495
New Mexico New Yorks Will	2,301	549	542.	1,103	553	565	1,198	546	520
North Carolina	41,209	493	493	18,432	496	510	22,777	490	479
North Dakota	991	504	605	198	809	630	268	584	587
Ohio	32,395	534	538	15,063	540	559	17,332	529	520
Oklahoma	3,091	292	999	1,438	576	584	1,653	559	539
Oregon Pennsylvania (27 P. P. P. P. P. P. P. P. P. P. P. P. P.	16,897	525	525 518 495 8	7,739	528	545 15-15-13	9,158	523	508
Rhode Island	6,904	504	499	3,158	511	518	3,746	499	482
South Carolina	23,093	479	475	9,822	484	494	13,271	476	7.21
South Dakota	451	585	288	202	591	607	249	280	.,,
Tennessee	7,286	559	. 553	3,415	564	572	3,871	\$56	536
Texas. Utahy	104,144	494	499	47,730	499	517	56,414	491	483
Vermont	4,911	514	206	2,198	519	528	2,713		488
Virginia	46,605	208	460	21,293	808	516	25,312	207	484
Washington	28,754	525	929	13,100	\$28	546	15,654	523	510
West Virginia	3,797	527	512	1,725	530	533	2,072	525	464
Wisconsin Wyoming *** ********************************	4,295	584	595 2015	2,067	585 #4551	613 (48(571)	2,228	584 5355	579 335



### 1999 SAT I Summary Report

Total
516 514 286 432
525 146
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572 572 31 542
545 546 38 509

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### 1999 SAT I Summary Report

	1	Total		American		Indian	Y	Asian		В	Black		Hi	Hispanic		1	White	
	Number	Mean V Mean M	Mean M	Number	Mean V Mean M	Mean M	Number	Mean V	Mean V Mean M	Number	ktean V Mean M	Меап М	Number	Mean V	Mean V Mean M	Number	Mean V Mean M	Mean M
	1,906	898	172	Ξ	545	518	19	533	295	78	469	463	42	\$09	522	1,573	575	579
	4,561	512	517	45	495	472	447	495	532	245	453	442	312	490	489	3,037	521	524
New Hampshire	10,227	520	518	89	201	\$08	219	528	587	72	916	504	125	492	485	8,028	615	\$15
New Jersey	65,358	498	510	273	471	478	5,014	517	581	6,265	427	425	5,248	442	449	36,271	521	530
New Mexico	2,301	549 495	542 502	48 50	506 24773	497	86 7,936	534	589	71	496	465	400	520	515 2442	1,287	569 (1521)	557
North Carolina	41,209	493	493	515	455	445	1,110	484	542	7,858	422	415	580	486	479	27,145	516	515
North Dakota	466	594	909	_	ı	ı	22	549	859	00	\$20	464	\$	530	\$20	401	009	614
	32,395	534	538	112	\$16	514	1,045	240	290	2,643	458	438	426	503	496	25,575	542	547
Oklahoma	3,091	567	. 360	174	564	. 553	183	545	595	194	483	450	77	532	534	2,134	576	. 267
Oregon Pennsylvania	16.897	525	. 525 1495)	226	503	495	905 (\$-872,604)	486	534	258	445	440	580	478	479	12,935 (2),71,530	532	529
Rhode Island	6,904	504	466	48	438	423	254	448	481	286	417	407	344	417	407	4,936	521	514
South Carolina	23,093	479	475	128	461	463	415	483	\$26	5,933	415	407	259	478	472	14,009	800	504
South Dakota	451	585	\$88	4	ı	1	13	\$65	623	43	1	ı	œ	195	175	390	587	201
Tennessee	7,286	559	553	31	\$05	494	357	530	597	689	482	160	. 83	\$22	513	5,470	572	563
	104,144	494	499	749	492	493 (5593)	5,549	507	563 1567	11,202	427 \$534	420 3 526	20,854	452	454	55,713	522 582	525 575
	4,911	514	906	40	490	454	77	443	\$15	25	464	447	42	505	503	3,827	516	507
	46,605	808	499	260	489	478	2,710	105	544	7,459	434	412	1,329	491	483	28,602	531	519
Washington	28,754	525	526	352	497	487	2,950	490	535	779	460	442	937	490	489	20,388	532	530
West Virginia	3,797	527	512	24	488	211	108	544	581	134	459	431	38	549	534	3,236	\$29	512
Wisconsin Wyoming West W	4.295	4,295 584	. 595 	32	571	564	161	569	615 # <b>56</b> 5 ?;	188	491	479	69	540	. 550 2,497.0	3,433	593	603

### 1999 SAT I Data Sources

### Test Takers

The 1999 data in these reports are based on 1998–99 high school seniors who took the SAT I, regardless of when they took it. Except for Report S.15, "Distribution of Scores Sent to Colleges," a student must have both verbal and math scores to be included in these reports. Report S.15, however, includes all the scores sent to a college whether or not the student who sent the scores actually had verbal and math scores.

The trend data are based on the same category of 1994-95, 1995-96, 1996-97, and 1997-98 seniors.

If the number of SAT I takers in a given category (for example, Hispanic SAT I takers who have a C grade point average) is less than five, then the mean SAT is cores of this group are not reported.

### Recentered Mean Scores

All mean scores presented in these SAT I reports are recentered scores. The mean scores from 1995 have been converted so that they can be compared to those from 1996 onward.

### Years of Study in Six Academic Subjects

A change in 1997 in the method of reporting 'Years of Study in Six Academic Subjects' prevents comparisons with previous years using the same categories. The table below summarizes the difference in reporting the years of study of those who took the test before 1997 and since 1997:

<u> 1994 – 1997</u>	1997 - present
1/2	1/2
1	1
2	2
3	3
4 or more	
	4
_	more than 4

### **NEWS ARTICLES**

The Sacramento Bos

To what extent is the SAT merely a way in which the children of the affluent can parlay their economic advantages into something that looks like merit?

## gets a grade of ( **[esting the SAT: 'Frontline'**

tive colleges is a blunt, unreliable instruused by nearly all of the country's selecbright and attractive minority kids out Comcast cable channel 7), will probably nyone who saw "Secrets of the SAT," the "Frontline" program broadcast last night on most of nyone who saw "Secrets of the be convinced that the admissions test repeated at 8 p.m. Friday on KVIE's the nation's PBS stations (it will be ment that serves primarily to keep

places, pushy parents enroll their kids at Cambridge Colloquium in order to drive family that hopes to send a kid to one of other commercial cram courses. In some Worse, one would conclude that every who can afford it spend hundreds of doltheir test scures as close as possible to lars on Kaplan, Princeton Reviow and the perfect 1600. A 1550, we are told, those colleges is test-obsessed. Those the age of 12 or 13 in the five-year isn't good enough for them. of college.

some second-rate test-prep program in their high schools, and maybe they won't Those who can't afford such things, well, maybo they'll be provided with get even that.

and Asian, though for the most part they

struggling students were black, Latino

just plain rich and ludicrous. The nobly

thoroughly affluent and, in a few cases, agenda burst through at all the seams

The only whites who appeared were

Unfortunately, the producers' political

opportunity; the carnest Latina and tho

herd-working black kid who manage to

get in despite their relatively weak

what they regard as the Cal-pinnacle of

Seattle who set their tecuage son up in increasing his chances of admission to

an East Bay condo in the hope of

this program; the Asian immigrants in UC Borkeley, which was Jerusalem in

PETER SCHRAG

he individual storics make for some told them nicely - the son of the Latino and 1240 SAT scores but didn't get into bluc-collar worker who had a 3.8 GPA human interest, and "Frontline"

sole - and very clumsy - defender of the tive, struggling white kids? There was a test from the Educational Testing Service and three talking heads to take

Couldn't the producers find any attrac-

were also theroughly middle class.

admissions director Bob Laird. Laird, who is shown working diligently with his staff to make fair choices, is described by Professor Robert Post pointed out during viewed at Berkeley's Graduate School of a discussion after the program was prethe narrator as being "caught between his own values and the law," meaning race based affirmative action policies Proposition 209, which prohibits the Journalism last week, was Berkeley that Berkeley was once able to use.

What the film does not tell is that of the 31,000 high school seniors who applied for this year's entering class with 4.0 averages. At the same time, one 4.0. Considering that 51 percent of California's K-12 school enrollment now the film, such numbers inevitably menn of very four admitted had a GPA below consists of Latinos, blacks and Indiana Laird made clear in the subsequent dis that worthy candidates will be turned down. Berkeley rejects 6,000 students - and from which it can admit 8,500 -14,000 have 4.0 averages or better: As cussion, but was not allowed to say in the 31,000 high school seniors

it apart. More telling, there was not the slightest inkling of the kinds of application numbers that a place such as Berkeley was dealing with.

The other great omission is the fact

of a place like Berkeley?"

There is life with or without Berkeley. We are told that the son of the Latino

there are hundreds of other colleges:

almost certainly have been admitted. We are not told that many students transfer other UC campuses - to Davis or Santa blue-collar worker who was rejected by The real hero of the film, as law

(and 26 percent live below the poverty level), what, as Laird put it, "is the role

post-screening discussion, Borkeley Chancellor Robert Berdahl even ruised a hypothetical question about establishing the voters and the courts, test scores are a threshold - presumably the academic level at which students can be expected to function effectively – and then choosbeing de-emphasized even more. At the based policies are being rolled back by ing by lottery.

Berkeley is now in a community college.

We are not told whether he applied to

Cruz or Riverside, where he would

poets, athletes, musicians, farm children, said, you choose a class that is as rich in ir.migrants - which in turn requires the institutional mission and responsibility You don't just choose individuals, Laird As Berdahl expected, the idea was quickly deflated as an abdication of talent and background as possible exercise of discretion.

> that there is anything like the California from community college. We are not told

State University

work perfectly, but it does still work. And "Frontline" doesn't really tell you that shoo criteria that most of the lyy League dard that could be applied to applicante used until after World War II. It doesn't was created to produce a national stan-Vet discretion has to be limited; not from all schools in all places, and that everyone is a Bob Laird. The SAT would replace the aristocratic white-

what extent, as author Nicholas Lemann points out in his new book, "The Big Test: The Secret History of the American

being raised: Just how well does it preespecially after the freshman year? To

dict student performance in college,

None of those things exonerate the SAT from the questions that are

program is partially based), is the SAT

Meritocracy" (on which the "Frontline" merely a way in which the children of Peter Schrag's column appears in The Bee on Wednesday. He can be reached by fax at 321-1996, or by letter at Box

make similar judgments about academic

like merit? Are there better ways to

the affluent can parlay their economic advantages into something that looks

Neither Berkeley nor any other selec-

potential?

gole criterion in admissions, and as race

tive institution uses lest scores as the

# SAT's usefulness is called into question

Documentary examines venerable test

By Connie Langland Knight Ridder Newspapers

n Saturday, an estimated half-million young people will take a test that has the potential to shape their lives.

It's the Scholastic Aptitude Test, the venerable college-entrance exam that is so much a part of the national psyche that middle-aged folk can recall their scores from 30 years ago.

But there are signs the SAT may have outlived its usefulness as a predictor of success in college, and at 10 tonight on PBS (Channel 6), the "Frontline" documentary "Secrets of the SAT lays out the issues that swirl around the exam.

There are questions aplenty. including:

- What does the SAT really measure?
  - Is it fair?
- What is the point, given that students have so many achievements to share with the "readers" the admissions people picking who gets into a prestigious school, such as the University of California, Berkeley?

Consider J.K. Delane. one of a half-dozen high-achieving seniors from the San Francisco area featured on "Frontline." The students vary mainly by race – and their SAT scores.

Delane wants to attend Berkeley. He is African American, has a 3.5 grade-point average, is senior-class president and homecoming king, plays varsity sports, and has held various internships and part-time jobs.

"I didn't fall short to fast cash, criminal behavior or drug addiction," Delane says. "Instead, I struggled to make it. I want to be someone ... someone successful."

He thinks he has a shot at Berkeley and when he mails his application, he muses over his fate: "One envelope can have a profound effect on which direction your life is going."

Delane also knows about the power of the SAT and that his scores are unimpressive: 850 out

## **ON TV**

Frontline
10 tonight on (3)

age score is 1,360 on the twopart exam, which tests math and verbal-reasoning skills.

This singular number clearly has shaken Delane's view of his abilities. "I really feel sorry for that; I really tried." he says, dejection apparent in his voice.

According to "Frontline," some parents hire tutors at hourly fees matching those of big-time law-yers. Others pay tuition for preparation courses for children as young as 13. Money issues aside, is that a good use of the child's time? Parents interviewed by "Frontline" clearly think so.

But Delane's mother doesn't have that kind of money, so he takes a free SAT review course at his high school. When he retakes the test, his score hobbles upward.

How Delane performs on the SAT seems to have little correlation with his achievements in high school. His experience is a stark example of the black-white score gap in standardized testing.

Is there bias in the test or a gap in IQ – or is something else going on?

In an intriguing segment, "Frontline" features Claude Steele, a psychology professor at Stanford University, who has studied this disparity.

His thesis is that minorities lose confidence in their abilities when they sit for high-pressure tests such as the SAT. He calls this the "stereotype threat" factor that results in under-performance.

Steele says he has found this result not only with minorities, but also with testing of white women against white men and white men against Asian men. The test-takers make basic mistakes, including spending too much time rereading questions and second-guessing their answers – in short, trying too hard.

The view of the College Board.

True or fals studies the Beach stud

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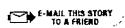
# BEE EDITORIALS



# Peter Schrag: Who belongs in the great American meritocracy?



PRINTER-FRIENDLY VERSION OF STORY



(Published Sept. 22, 1999)

launched against race preferences in college admissions, and to some extent for many years before, the country has been sinking ever more deeply into a frustrating question that may be more appropriate for philosophers than for the politicians and educators who are trying to deal with it: What is merit?

Late last month, the question surfaced again with the disclosure that ETS, the Educational Testing Service, which administers the SAT and many other university admissions exams, was trying to develop a formula that would identify "strivers" -- students whose test scores were higher than could have been predicted from their racial, economic and personal backgrounds, and who might thus be given an advantage in the admissions process.

As soon as the story was leaked (to the Wall Street Journal), the idea was roundly denounced by opponents of affirmative action as just another way to extend favored treatment to blacks and Hispanics who scored low on standardized tests and other numerical measures of academic achievement. "If this formula errs by using dubious arithmetic to arrive at a judgment of human potential," wrote Shelby Steele, who is now a research fellow at the Hoover Institution, "its worst offense is to count being black, by itself, as a handicap. In fact, unless blackness is thrown in into the calculation, this formula fails to bring in the desired number of blacks."

The strivers idea was quickly repudiated by the College Board, which sponsors the SAT testing program, and by individual universities, and played down by ETS itself, whose spokesman declared that "there is no [such] product or program or service" now being contemplated.

But the strivers proposal is just part of a larger set of questions now being asked about judging merit. Earlier this year, the issue was raised by William Bowen and Derek Bok in "The Shape of the River," their defense of affirmative action in admissions in the Ivy League and other selective American colleges. Bowen and Bok defended tests like the SAT.

The standard of merit they advanced was not based on grades or test scores -- or even on the question of who "deserved" to be admitted -- but rather on a determination of which students had the potential of contributing the most to their campuses and to the society after they graduated. Under that criterion, admitting minorities who would become leaders in their fields and communities was more important than merely taking students with high scores.

Now an important new book, "The Big Test: The Secret History of the American Meritocracy," by

..... 195 h

journalist Nicholas Lemann is likely to put more fuel under this boiling pot. Lemann traces the history of the SAT to show that what had been designed for selecting a small elite into the nation's high-status colleges -- a failed latter-day version of Jefferson's dream of a natural aristocracy of virtues and talents -- has been inappropriately transformed into an all-purpose measure of merit. What about all those other attributes -- imagination, courage, determination, understanding -that aptitude-based educational tests don't measure?

"There is much more space than we realize," he writes, "between the idea we've come to call meritocracy and the actual specific American meritocracy we are living with."

The issue was raised in a different way last spring, when the U.S. Department of Education warned colleges that if their admissions tests have a disparate impact on minorities they'd better be prepared to show that they are technically sound, "educationally necessary" and that no alternative mechanism exists that has less disparate impact on minorities. Faced by protests and threats of a

congressional investigation, the department beat a retreat, but the issue isn't going away.

Indeed, the rollback of race-based affirmative action that's done so much to highlight the issue has already begun to change the way merit is defined. Both California and Texas have moved to de-emphasize test scores by adopting policies that will admit to their selective university systems all those who graduate near the top of their high school classes. In Texas, it's the top 10 percent; in California it will be the top 4 percent.

More important, at places such as Berkeley the prohibition on race preferences has led to broader changes in the way students are chosen: The old numerical formulas, which were based largely on grades and test scores (and ethnicity), are being replaced by attempts to evaluate each applicant's complete record -- skills, interests, background, handicaps overcome, as well as academic record.

"The 'inclusion' we most need now," said Shelby Steele in his attack on the ETS strivers proposal, "is in the realm of intellectual respect -- which can be gained through merit alone." But approaches such as those now being used at Berkeley -- if they can be politically sustained -- go far beyond the simplistic equation of merit with a high school GPA and an SAT score.

And as errors and gross misjudgments in standardized testing programs are becoming more apparent, the same questions will become more insistent in K-12 education. Given the pervasive scoring mistakes reported last week in McGraw Hill's CTB-Terra Nova tests in New York and at least a half dozen other states, and in light of similar errors reported in California's testing program last spring, can any single set of criteria be safely relied on for the high-consequence decisions -leaving students back or denying them diplomas; dismissing school principals; transferring teachers -that are now being based on them? Any politician who thinks so better talk to a good lawyer first.

PETER SCHRAG's column appears in The Bee on Wednesday. He can be reached by fax at 321-1996; or by letter at Box 15779, Sacramento, CA, 95852-0779.

# USU, UC to align entry requirements

# Systems seek to end confusion among college-bound students

By Emily Bazar Bee Staff Writer

The state's two university systems are poised to align their admissions requirements for the first time, a move that would enable high school students to take the same set of college-prep courses whether they want to attend California State University or the University of California.

At its meeting today in Long Beach, the CSU board of trustees is expected to approve the policy for students entering in fall 2003 and beyond. UC regents approved their portion of the alignment last spring.

The change won't affect the systems' differing missions: By state mandate, the CSU system aims to admut students who place among the top third of public high school graduates, while the more selective UC system chooses from the top eighth.

Still, many educators believe that aligning requirements will foster simplicity. Counselors and collegebound students for years have complained that the different course requirements are confusing, sometimes forcing students to alter or delay college plans.

This will help communicate to kids about what they need. UC and CSU will be singing from the same hymnal," said state Superintendent of Public

The aliance see COLLEGE, page A13

# College: State focusing on grade-level standards

Continued from page A1

Instruction Delaine Eastin, who by nature of her post is a CSU trustee and a UC regent. "It's important for students to understand ... that there's more required in this new century."

Currently, both the CSU and UC systems require students to take 15 yearlong courses to become eligible for admission, in ad-

dition to other criteria.

In March, UC regents voted on their portion of the alignment by adding a year in the visual and performing arts and reducing the number of required academic elecrives by one.

To complete the alignment. when CSU trustees meet this morning, they are expected to reduce by two the number of elective courses CSU now requires, and to eplace them with an additional vear of laboratory science and an additional year of U.S. history/social science.

CSU's past experience indicates that asking high school students to take on more core academic courses doesn't necessarily translate into better-prepared students.

In 1985, CSU trustees voted to increase the number of required high school courses from six to 15. The new requirements were phased in beginning in 1988.

Despite the increase, the CSU system struggles with a large number of entering students who require pre-college instruction. Last fall, more than half the system's entering freshmen needed remedial work in math, and nearly half were behind in Engli. h.

CSU and UC admission red Cultural and proposed admission requirement students: One unit equals one year of high w		entapper di	Proposed
Subject	CSU	uc_	canno
English	4 units	4 units	4 units
Mathematics (algebra, geometry and intermediate algebra)	3 inits	3 unds	3 units
U.S. history or U.S. history and government	1 unit	2 units	2 units
Science with laboratory	Junit	2 units	2 units
Foreign language	2 units	2 units	2 units
Visual and performing arts (art, dance, theater, music, etc.)	1 unit	O units	i unit
Electives (English, advanced math, social science, history, laboratory science, foreign language, visual and performing arts, and agriculture	3 units	2 units	1 units

15 units 15 units 15 units 

Source: CSLI Office of the Chancellor

Bee grapnic

Educators at all levels are learning from such experiences. and are shifting their focus from course load to course content as they attempt to raise competency levels of college-bound students.

"Algebra in some schools is not the same as algebra in other schools," said Joni Finney, vice president of the National Center for Public Policy and Higher Education in San Jose. "We need to say, These are the skills and competencies that students ought to have to be successful in higher education.'"

The state has responded to the criticism by adopting standards for kindergarten through 12th grade that outline grade by grade what students should learn in the four major subject areas: science.

history/social science, math and language arts. And educators are developing an exam that would assess whether students are mastering those standards.

"It's very clear we want the students not just to take the courses, but actually to master the material ... and master the standards." said Bill Vasey, the state Department of Education's liaison for higher education issues.

However, at most high schools across the state, conversations about aligning course requirements don't include words like assessment and mastery, but relief.

"This has been something we've been asking and begging for a long time," said Sherryl Simonsen, a counselor at Folsom High School. "This just makes it so

much easier for students and parents to understand."

At River City High School in West Sacramento, some students aiming for the UC system didn't fit a visual and performing arts course into their schedules. When they later realized they wanted to attend a CSU school, they had to do some scrambling, said head counselor Susan Gossard.

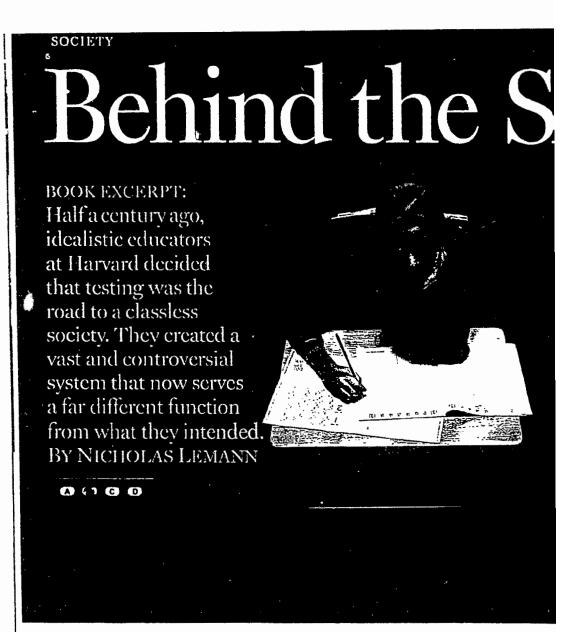
The proposed change also could pose short-term problems for school districts. Because more students may take laboratory science classes, districts may need to hire more science teachers - a position California high schools already have a difficult time filling - and could face a shortage of lab space.

In the Sacramento City Unified School District, students are required to take two science courses before graduation, but not necessarily two laboratory science courses, which the two university systems now will require.

"It's something we would have to be prepared for. It will have some impact," said Kathi Cooper the district's administrator of standards, curriculum and instruction.

"It's easy to say 'We're bumping up CSU requirements.' but for some school districts it will be problematic," added Alec Ostrom an assistant superintendent ir the Roseville Joint Union High School District.

Ostrom predicts his distric won't experience many side effect: from the change, but others could "Adding science rooms and every thing that goes with it ... is as expensive proposition." he said.



MAGINE AN AMERICAN WHO HAD BEEN PUT TO sleep half a century ago, and reawakened on the eve of the millennium—a modern-day Rip Van Winkle or, to update the reference, Austin Powers. Surely one of the most surprising things about the country today would be the peculiar, pervasive frenzy over standardized tests, especially admissions tests and especially a test for college applicants called the SAT. It is a feature of late-20th-century America that didn't exist in the first half of the century, and that surely would have stunned the people who devised the test.

More than 2 million young people will take the SAT this year, and half as many will take a rival college-admissions test, the ACT. Many of these will pay handsome fees to an industry that has sprung up on the claim that it can improve scores on the test. Universities and high schools are widely judged according to their average SAT scores, and engage in a frenzy of their own to improve them. What students are taught in school, beginning in the prima-

ry grades, has been partly reversescores on the SAT and other standivalues fluctuate with the average S. schools. The test is widely believed selective college, which in turn is wilife of prestige and prosperity. Peo score as a permanent measure of the

There is a bitter national politics the persistent racial gap in average sites strictly on the basis of test scor suits from minority organizations emphasizing scores to achieve racial and ballot initiatives. Presidential have to have something to say about will almost certainly rule during whether it is constitutional to use so cide who gets jobs and slots in select

Yet the test has a mysterious q Scholastic Aptitude Test, was chan Assessment Test, but now its purvinitials, to avoid discussion of exa-

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Adapted from "The Big Test: The Secret History of the American Meritocracy."

1999 by Nicholas Lemann. To be published by Ferrar, Straus and Giroux.

measure. The story of the test's creation and its rise to totemic importance has never been told-until now. What will be perhaps most surprising about it is how different the social function the test was supposed to perform is from the one it does perform now: a device meant to eliminate an American class system has instead helped create a new one.

In the archives of Harvard University, neatly stacked and tied up in a folder inside a box, is the manuscript of a book that was never finished and never published. It is called "What We Are Fighting to Defend," and was written by Harvard's president James Bryant Conant at the outset of the second world war.

Conant was not just president of Harvard (and before that an outstanding chemist), he was also one of the architects of the entire modern American educational system, from kindergarten through graduate school; and one of the fathers of the atomic bomb; and a key planner of the reconstruction of Europe after the fall of the Nazis. His views mattered a lot. And the book proposes a sweeping, dramatic, almost utopian remaking of American society from top to bottom, in order to avoid what Conant saw as a national crisis.

Conant believed that in the half century leading up to 1940, the United States had gone from being a classless, democratic society to one that was relentlessly falling under the control of a hereditary aristocracy. When Conant was a young man, the pre-eminent American historian was Frederick Jackson Turner, who spent his career glorifying the open lands of the Old West and bemoaning the closing of the frontier-not because of its endless vistas or its romantic history, but because, in his view, it had provided opportunity to all. But now, Conant, taking his cue from Turner, saw this most precious quality of American society slipping away.

OST HISTORIANS WOULD NOW regard Conant's (and Turner's) assumptions as wrong. Social mobility did not dramatically decrease in the United States between the mid-19th century and the mid-20th. But at the time Conant was writing, the country didn't seem to be functioning very well: the Great Depression had not really ended yet, as the bread lines and migrant-labor camps that were regularly shown in newspapers and magazines dramatically demonstrated. Conant, a liberal, found it alarming that socialism (and even communism) was on the rise. Opportunity and social mobility were the best

ways Conant could see to forestall a national turn to the left. Closer at hand, the institution Conant ran, Harvard, was dominated by a distinct social group that he despised. Harvard College was a regional institution, not very hard to get into, and full of rich boys who had gone to New England boarding schools. The number of Jewish students was I mited by quota, and the number of most other kinds of students who departed from the norm didn't have to be limited because the idea of going to Harvard was a possibility that hadn't even occurred to them.

Practically the first thing Conant had done upon becoming president of Harvard in 1933 was set up a small-but historically crucial, because many consequences flowed from it-scholarship

program to bring a few hand-picked outstanding students from modest backgrounds and faraway locations to Harvard. He meant this as the opening wedge of a wholesale change, not just in the nature of Harvard College, but also, in the long run, of the American elite. If Harvard could become a more national university. populated by people chosen for their academic promise without regard to their background, then eventually the establishment institutions into which Harvard fed its graduates-the Wall Street financial houses and law firms, the State Department and the Treasury, the Ivy League faculties and the medical-research hospitals-might adopt the same selection principle and be run by peo-

ple cut from the same cloth as Conant's Harvard National Scholars. Not accidentally, there was a pronounced similarity between the kind of scholarship student Conant was looking for and Conant himself, who was the first non-Boston Brahmin, and the first serious modern scientist.

to be made president of Harvard.

But how would you find these people? In 1933, that was quite a tough problem. The United States, then as now, had an extremely decentralized public-education system that was under the control of 15,000 separate, independent local school boards. It was nearly impossible to perform straight-up comparisons across a national pool of high-school seniors. Conant gave two of his assistants, Wilbur Bender and Henry Chauncey, the task of devising a new way of selecting his new scholarship students.

Bender was himself roughly the kind of person Conant wanted the two men to look for-a serious, studious, self-made Mennonite from a small town in Indiana. Chauncey was just the opposite, as purebred a member as you could find of the American aristocracy that Conant wanted to displace. The first Chauncey to come to America, Charles, Henry's great-g great-grandfather, was a Puritan minister who became the second president of Harvard, back in the 1600s. Henry Chauncey himself, born in 1905, had been raised in the very bosom of the Eastern Seaboard elite, which might be called, after the religious denomination to which the plurality of its members belonged, the Episcopacy. Like his father beforehim, he had gone to the leading Episcopalian boarding school, Groton. Chauncey exemplified the Episcopacy's value system, as opposed to Conant's. He was not scholarly or intellectually brilliant, but he was athletic, devout, energetic, honest and a natural leader.

Somewhat improbably, though, Chauncey as a young man became a wholehearted devotee of the

new science of mental testing. Alfred Binet, a French psychologist, had devised the first test of human intelligence in 1905, the year of Chaur cey's birth. American promoters, led by Lewis Terman, a professor at Stanford, seized upon Binet's test as a way of measuring "I.Q." (Terman's term, not Binet's), the supposed inherent capacity of the brain, and pushed for its use as widely as possible. The I.Q. testing movement's signal breakthrough was persuading the U.S. Army to test millions of recruits during the first world war: this was the first mass mental test in history.

Chauncey was an ambitious, idealistic young man, and testing represented the advanced thinking of his day. It touched something deeper in him as well-an orderly Puritan strain, desire to

THE FATHER OF TESTING



Harvard president James Bryant Conant

**James Conant** believed that the SAT would help to identify and then select a natural aristocracy, creating a new frontier for opportunity

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improve the human condition by systematizing it. In any event, by the time Conant gave him the task of selecting scholarship students in 1933, Chauncey was hooked on testing.

Soon Chauncey and Bender reported back to Conant that they had found a test that could be used in his new scholarship program. It was called the Scholastic Aptitude Test, or SAT, and it had been developed by a psychology professor at Princeton named Carl Brigham.

Brigham had been one of the Army I.Q. testing team during the first world war. Over the next few years he became a leading member of the eugenics movement, which, in those days of high unre-

stricted immigration, was concerned that the quality of the national human breeding stock was being perilously diluted by inferior foreigners. At the same time he began adapting the Army test for use in college admissions. He administered the SAT experimentally for the first time in 1926. By the time Chauncey met him, Brigham had undergone a dramatic political conversion, breaking with the eugenics movement and denouncing the concept of LQ. But he kept working on the SAT.

When Chauncey presented Conant with the idea of instituting the SAT, there was one point about it on which Conant repeatedly demanded reassurance: was it a pure test of intelligence, rather than of the quality of the taker's education? Otherwise he was concerned that bright boys who had been born into modest circumstances and gone to poor schools would be penalized. Chauncey was able to reassure Conant about the SAT, and so it was adopted.

OMEWHERE ALONG THE LINE COnant encountered a historical document that functioned for his whole life as, in effect, the tablet on which a hallowed figure had inscribed the essence of the ideas he was pursuing. It was a letter that Thomas Jefferson wrote to John Adams in 1813, when both of them were retired presicients. "I agree with you that there is a natural aristocracy among men," Jefferson wrote. "The grounds of this are virtue and talents ... There is also an artificial aristocracy founded on wealth and birth, without either virtue or talents." Conant felt he was ideally positioned to put into effect, finally, Jefferson's dream, by creating a natural aristocracy, putting it in charge of the United States and structuring the rest of the society around it. The SAT was an essential tool, which hadn't been available to Jefferson.

Frederick Jackson Turner used to suggest, hopefully but vaguely, that education might one day fill the former role of the frontier. In his day only a small fraction of America's youth finished high school. By the time Conant was running Harvard, the public-school system had expanded to the point that the time for turning it into an orderly, bureaucratized replacement for the frontier seemed to be at hand. In our public schools, Conant wrote, "we have before us a new type of social instrument whose proper use may be the means of salvation of the classlessness of the nation ... Through public education we can in this century hope in no small measure to regain that great gift to each succeeding generation, opportunity, a gift that once was the promise of the frontier."

Conant most assuredly did not, however, believe in making as

much education as possible available to as many people as possible. In 1944 he was a leading opponent of the G.I. Bill, because it gave every veteran a ticket to college. What he wanted was to select the natural aristocrats with absolute fairness and exactitude, send them on to universities and leave most of the rest of the citizenry to a more modest yeoman's existence based upon education through high school or perhaps junior college. So the school system, engine of democracy though Conant wanted it to be, would quite firmly assess Americans' abilities and assign them to roles at an early age.

It seems fair to ask how you can create a classless society by establishing a system that relentlessly classifies people. At the time,

though, the establishment of the natural aristocracy scemed so revolutionary to Conant that it crowded out all other considerations. Never before had there been a way of scientifically, rationally picking just the right clite; placement in the top tier had depended on happenstance and fortunate birth or, at best, simple aggressiveness. Now, because of the twin developments of public education and intelligence testing, it was possible to scan the entire population and fit the natural aristocrats with the glass slipper.

Conant also believed that once chosen and educated, the members of his new elite would ferociously devote themselves to public service and democratic values. The possibility that selection would become a route to purely private, pecuniary success, which is overwhelmingly how it is seen today, doesn't seem to have crossed his mind. In an article he wrote in The Atlantic Monthly in 1943, he called his new man-the idea of female natural aristocrats didn't occur to him either-"The American Radical," and confidently predicted that "he will be a fanatic believer in equality." The natural aristocracy could never become a hereditary one, because the American Radical "will demand to confiscate (by constitutional methods) all property once a generation" and "use the powers of government to reorder the 'haves and have-nots' every generation to give flux to our social order."

If you strip away the soaring and nationalistic rhetoric, Conant's idea wasn't particularly new, or particularly American. Creating a governing intellectual elite, chosen by test and specially educated, is a concept long predating Jefferson's letter to Adams in 1813. Plato proposed essentially the same thing back in the third century B.C. European countries began distributing choice berths in government and the armed forces by examination early in the 19th century. But these earlier systems did not try to test every single person—only those

who wanted top jobs in the career government service. They did not attempt to apportion opportunity at all levels of their societies—only to pick a few people for a few specific roles. And, of course, they did not use intelligence tests, which hadn't been invented yet. What Conant proposed to do was radically expand a venerable, limited idea into an all-encompassing system that sorted and slotted an entire populace early in life on the basis of their scores on intelligence tests, all in the name of creating a perfected, classless and democratic America.

Wars are a golden opportunity for restructuring societies. James Bryant Conant and Henry Chauncey, realizing this, moved quickly and surely to establish their testing regime after the second world

SEEKING OUT THE BEST



Harvard students at a football game, 1956

Conant despised the privileged student body at elite schools like Harvard and hoped to attract talented students from a variety of backgrounds

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COURTESY OF THE HARVARD CHIVERSITY ARCHIVE

war began. Just after the attack on Pearl Harbor, the old essay tests | Advancement of Teaching, and in return Zook handed over the for college admission were suspended and replaced with the SATfor all applicants, not just scholarship students. In 1943 Chauncey. under contract to the Army and the Navy, administered an adapted SAT to more than 300,000 people nationwide on a single day, for officer-selection purposes. Before the war the total annual number of SAT takers had never exceeded 20,000; Chauncey, by perfecting the techniques of large-scale, secure, reliable test administration and scoring, demonstrated that it would be possible to use the SAT to assess all high-school students in the United States. As soon as the war was over. Conant, through an adept series of bu-

reaucratic maneuvers, arranged for all the leading educational tests and testing organizations in the country to be merged into a new, private, nonprofit entity that would effectively hold a monopoly in the field, called the Educational Testing Service. Henry Chauncey was its first president, serving at the helm from the postwar founding days until 1970.

The establishment of ETS was hardly inevitable. It represented the triumph, after a tough fight, of one option over several others. In most other countries, the function of ETS is performed by a government agency, not a private organization relatively unaccountable to the public. In the United States in midcentury, those who believed in using I.Q.-descended tests for selection represented only one faction of the testing movement. There was also a more populist Midwestern camp that wanted to institute public-school achievement tests (not aptitude tests) just to make sure that students were learning (not to select a few for special training), and that burned with resentment over the establishment of the elitist ETS as the emperor of American testing. Even the tweedy deans of the lvy League universities weren't crazy about embracing the SAT as their admissions device. And in particular, the establishment of ETS required the vanquishing of two powerful individual enemies.

One was Carl Brigham, the father of the SAT. Brigham believed that if there were a big, new testing agency that had to survive financially on fees paid by the takers of its tests, it would inevitably be devoted mainly to protecting and promoting the tests, rather than to evaluating and improving them. He warned, prophetically: "If the unhappy day ever comes when teachers point their students toward these newer examinations ... then we may look for the inevitable distortion of education in terms of tests."

The other leading opponent of creating ETS was George Zook, the head of the American Council on Education, the trade organization for the country's big public universities. Zook was a considerable figure: after the war he was named head of a presidential commission on the future of higher education. He saw Conant's new organization as representing a power grab by the Ivy League universities; and anyway, he didn't see why universities, in those days of nearly open admissions and low graduation rates in the state schools, had to be selective at all. Brigham died in 1943, at the age of 51. That eliminated him as an opponent. Conant and his allies eliminated Zook, in the end, by bribing him: his perpetually strapped organization was given \$50,000 a year for three years by the Carnegic Foundation for the

American Council on Education's tests to ETS.

Henry Chauncey, who didn't especially share Conant's belief in intelligence tests and social engineering but did believe totally in the power of scientific testing to diagnose and solve the bedeviling mysteries of the human mind, initially wanted ETS to move far bevond the SAT and mount a grand project that he called the Census of Abilities. ETS, funded by the federal government, would test all Americans twice during their high-school years, not just on the quality the SAT measured, but on every other attribute as well. Then, based on the results, we would all be advised what we ought

to do with our lives, and much misery stemming from disorganization and lack of information would be avoided.

With appropriate fervor and great determination, Chauncey pursued the dream of the Census of Abilities, but without success. One problem was that he never found an interested sponsorneither the government nor, after his efforts there failed, business could be persuaded of the usefulness of such an expensive and ambitious project. Another problem was finding new tests that provided results as reliable as the SAT's. Over the years Chauncey considered establishing standardized tests of personality type, of creativity, of practical judgment, of persistence, of sense of humor, even of marital compatibility. In all these cases the ETS technical staff persuaded him that the tests

were not up to the company standard. But all through the years that the Census of Abilities was flopping, the SAT and its progeny, intelligence-based tests for admission to graduate and professional school, which ETS also launched, were becoming an ever-greater hit. By the time Chauncey retired, the SAT had more than 1.5 million takers a year.

O SOME EXTENT THE GROWTH OF the SAT was one of history's irrational booms, since only a relative handful of the country's many universities are selective enough to need a ruthless numerical device for separating the wheat from the chaff in their applicant pools. Nonetheless it caught on, to put it mildly. The SAT had a series of advantages. It rode a great, historic expansion of American higher education to a size and extent never before dreamed of in any country. It was ingeniously financed: because individual students paid a fairly modest fee to take the test, ETS's products were free of charge to the customers who ordered them, the universities. So way not require

the SAT? In a country in love with technology and statistics, the test acquired a sheen of official prestige. Universities could use it to make and to explain admissions decisions cheaply and efficiently. The net result was that instead of Chauncey's grand, all-encompassing Census of Abilities, we got a national census of one ability: "scholastic aptitude." A test that predicts about 15 percent of the variance in freshman grades in college became a national obsession.

In "What We Are Fighting to Defend," Conant wrote, "If we are to continue to have an essentially free and classless society in this country, we must proceed from the premise that there are no educational privileges ... no one channel should have a social standing above the other."

# A TEST FOR



A student takes an exam at an ETS facility, 1952

ETS's first president had initially hoped to devise tests that would measure everything from personality type and creativity to sense of humor



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In hindsight Conant was being terribly naive. In a county preoccapied with individual opportunity, if you make educational selection the avenue for it, and if being selected brings great benefits and minimal obligations, then naturally a fierce competition to be selected will develop—not for patriotic or democratic reasons but precisely because, despite Conant's plans, the top educational channel does have a social standing (and also an economic standing) above the others.

It didn't take long, after the system had been put in place, for people to begin trying to manipulate it to get a better outcome for themselves. This came as a shock to ETS, which had imagined that test takers would gratefully and passively accept their scores. One day in the 1950s a high-school principal from Brooklyn named Abe Lass came down to the 400-acre farm outside Princeton, New Jersey, where ETS was building a new campus for itself, and informed

the executives there that a man in his neighborhood named Stanley Kaplan had set himself up in the SAT tutoring business. According to Lass, after every administration of the SAT, Kaplan would give a party tor his young charges. Each student was instructed to remember one question from the test, and to tell it to Kaplan at the party. Then on to the hot dogs and root beer. After a few of these parties, Kaplan had a pretty good set of actual SAT questions that he could go over with his students, many of which might turn up on the next administration of the test. ETS considered trying to get the New York State Legislature to declare Kaplan's business illegal, but settled for insisting, for decades, that its tests were uncoachable, even as a substantial test-

prep industry (with Kaplan's company, now owned by the same corporation that owns Newsweek, the biggest player) grew up around them.

What would have been another rude and hurtful surprise to Conant was that his system became a focal point for racial tension. In the 1940s, it hardly occurred to this champion of opportunity and classiessness to mention that the most obvious departure from these principles was not the Episcopacy's domination of Harvard College, but segregation. And by the 1950s and '60s, when white Americans (very much including Conant) had awakened to the seriousness of the race issue, the testing system that he had helped establish offered a pretty stark choice between black advancement and the handing out of educational opportunities by test score. A substantial black-white gap in average test scores has been one of the most consistent findings in testing from the very beginning, so anyhody who wanted to increase the black (and also the Hispanic) representation in the new educationally derived elite would have to depart from picking strictly by test score-that is, practice affirmative action. But that has generated wave after wave of protest, none more intense than the current one.

It is speculative, but nonetheless irresistible, to wonder more broadly what Conant would think of his creation if he were around to see it half a century after the founding. He would surely be pleased to see that the leading research universities had become national institutions, with not much of the old high-society tone, open to extraordinary students from every corner of America. But the larger part of his plan didn't come true. We are not a classless society today. The social order does not turn over every generation. Many of the students at the top universities may be natural aristocrats in the Jeffersonian sense, but very few of them are American Radicals in the Conant sense: enemics of privilege, public servants and champions of an ever-growing central government. Instead, if they constitute a type, it is highly paid expert advisers, possibly liberal but certainly not radical: management consultants, investment bankers, corporate lawyers, tertiary-care doctors. The members of this new elite aren't

the country's acknowledged leaders, as Conant had imagined they would bethey're at least as much resented as admired. They try like mad to pass on their advantages to their children; those who aren't members try like mad to get in; and the great majority who can't get in don't much like the system. It has not restored social cohesion and harmony to a divided nation, as Conant had hoped. The whole story, if it weren't so important, would make a perfect little laboratory experiment demonstrating that the project of picking just the right elite and the project of building the perfect democratic society turn out to be not very closely related.

Conversely, if today we want to use education as our national engine of universal opportunity, the way to do it is not by tinkering

with the system for deciding whom to admit to the top few universities and graduate and professional schools. It is better for the country to have a capable, patriotic, empathetic elite than not, but having one doesn't automatically guarantee a fair society for everybody else.

The SAT and tests like it were put into effect not to fix the problems of American education, but to bypass them. They were supposed to find a few gifted students, even if they went to bad schools, send them to universities on scholarship, and leave the majority alone. Today young Americans are penalized much more severely if their schools are bad than they were back when ETS was created. Then, the White House was occupied by the last president not to have a college degree, Harry Truman. Now almost the whole white-collar world is closed off to people who didn't go to college, and the dramatic growth in the economic and social gap between the college-educated and everybody else is perhaps the most significant demographic change of the last generation.

Our society works remarkably well for people who go to good schools and can score well on the SAT. The people for whom it works least well are those at the unacceptably bad lower end of the public-



In 1963 the number of students taking the SAT surpassed 1 million

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education system. For them, the only reliable way to guarantee a good education that confers the basic skills for a decent life—what they're not getting now, in other words—would be to make sure that all our schools meet a minimum standard of quality. We don't think twice about doing this where commercial air travel or the meat sold in supermarkets is concerned, but when the subject is our children's futures, the inviolable sacred principle of local control of education is the more important trump card. It's time for us to reverse the order: learning should be primary, local control secondary. Local schools that aren't performing should be taken over by higher authorities—and they already are, by the hundreds, all over the country. In the worst cases, after everything else fails, the federal government, whose intervention has been consistently needed to break the logiam for poor minorities (and that's who mostly populate the bottom tier of public education), should take over.

TANDARDIZED TESTS ARE A NECESSARY TOOL IN THE fixing of American education. Without them there isn't any way to tell whether students are acquiring basic literacy and numeracy. But there are tests and tests. The tests that have the least reforming effect are aptitude measures like the SAT, which are aimed at selecting out a few students rather than evaluating the performance of schools. The best tests, from the standpoint of achieving Conant's dream of a more classless America, would assess students' mastery of basic skills and of the material taught in schools. Standardized tests ought to be tightly coordinated with the curriculum, so that schoolwork and test prep are the same thing—but here again, the localism of American education is a roadblock. A national curriculum (another idea that's absurdly forbidden in American politics), and national standardized tests based on it, would be by far the best way

to ensure that our schools are teaching and that our students are learning. The SAT created, in effect, national education standards for the clite, and the elite have benefited tremendously from that. Now everybody else should get the same benefit.

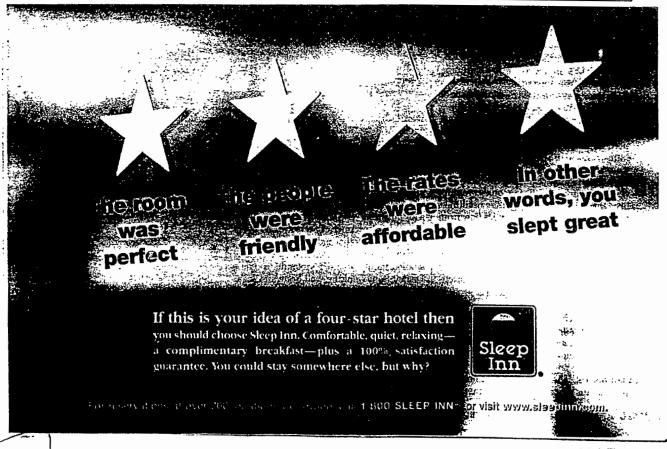
The word "meritocracy"-coined by a contemptuous British social satirist in 1958, but now burnished with a positive gloss-is often used to denote the system built around the SAT and the contest for prized admissions slots in elite universities. Setting up higher education as the referee in a great race for America's richest economic rewards was not, to put it mildly, what the founders of the national testing system had in mind. Even if it had been, though, the idea that the fairest way to apportion opportunity is according to performance in school is eminently arguable. There are many kinds of merit-courage, principle, determination, originality, understanding-but an educational meritocracy picks out one kind, academic ability, raises it to supreme status and ignores the others. It makes long-term decisions about people when they are very young-often when they are still living under their parents' roofs. It generates a status hysteria around admissions that detracts from genuine education.

If a meritocracy is what we want, we ought to think about not using our schools as the machinery for it. The main purpose of American education should be to bring us together with a set of common skills, common experiences and common values. Schools should do this for as many people as possible, not just for a fortunate and gifted few.

And then, after graduation, let the race begin.

### STOP

If you finish before time is called, you may check your work on this section only. Do not turn to any other section in the test.



# The Big Score

High-stakes tests are rapidly becoming a rite of passage in districts around the country. But do they really improve learning? BY DANIEL MCGINN

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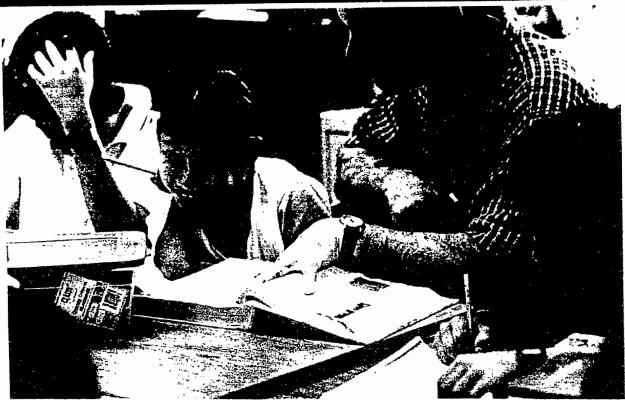
nside chicago's top-ranked Whitney Young High School, the posters started appearing last December. LET'S BE #1! GIVE IT 110%! Usually this sort of rahrah propaganda supports the basketball team, but this campaign by the principal had a different aim: urging kids to score high on the Illinois Goal Assessment Program, a standardized test that students would take in February. Tests are nothing new to the kids at Whitney Young-they already take three other batteries of standardized exams each year. But for a group of high-achieving 11th graders, the pressure was just too much. These kids say real learning is being shoved aside as teachers focus on boosting test scores. Creative writing? Forget it. Instead, they say, teachers emphasize a hoilerplate essay format that exam scorers prefer. So on Feb. 2, eight juniors purposely failed the social-studies portion of the test. The next day 10 failed the science test. Then they sent a letter to the principal: "We refuse to feed into this test-taking frenzy."

As rebellions go, it wasn't exactly the Boston Tea Party. But it's a small sign of the growing anxiety among parents, teachers and kids over the proliferation of standardized tests. Fill-in-the-hubble exams have been part of classroom life for decades, but for most of their history they were no big deal. Scores were tucked in students' folders; at most, they were used to segregate kids into higher- and lower-level classes. That's changed dramatically in the last decade as reformers try to improve school quality by holding educators accountable for learning. Every state has a different testing scheme, but many state legislatures are writing new standards for what kids should learn in each grade and mandating tough new "high stakes" tests to gauge progress. Unlike such old-style standardized tests as the Iowas or Metropolitans, many of the new exams are linked to the curriculum and feature essays and short answers, not just multiple choice. The biggest difference: low scores can bring real pain. Kids can be held back, forced into summer school or, under rules in 26 states, denied a diploma. Educators can lose pay or be fired; schools can face state takeover. In polls, the tests win wide public support, and more states are jumping on the bandwagon.

Yet there is no easy answer to the most basic question: do these tests help kids

THE PRESSURE IS ON: In Brooklyn, Steven Ip studied hard for the test that determined whether he would repeat third grade

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EXTRA ATTENTION: In Los Angeles, Levinson thinks the tests are unfair to his fifth graders, who are still learning English

lcarn? As the testing movement has grown, opposing experts have churned out a mountain of conflicting research. Fans of the tests say they're as necessary to schooling as a scale is to dieting, Ideally, they're diagnostic tools, letting teachers know Jack doesn't understand two-digit multiplication and Jill needs help with subject-verb agreement. Yes, it's sad that a single exam might keep a child from graduating, but most European countries already use exit exams, and some U.S. students are kept from graduating for lesser offenses, like flunking gym or cutting too many classes. And as schools ask for money to hire teachers and cut class size, taxpayers have every right to expect a measurable payback. Supporters of the new exams point to encouraging results in Texas, one of the first states to implement this type of reform plan.

Despite those arguments, a growing number of critics say this testing inevitably leads to dumbed-down teaching. "Every hour that teachers feel compelled to try to raise test scores is an hour not spent helping kids become critical, creative, curious

# TOO MUCH TESTING¹ OR NOT ENOUGH?
 TALK ABOUT IT AT WWW.NEWSWEEK.COM
 ON WEDNESDAY, SEPT. I, AT NOON EDT.

thinkers," says Alfie Kohn, author of "The Schools Our Children Deserve." It's those skills, after all, that put the United States ahead of world competitors in areas like entrepreneurship. Last fall the National Research Council warned Congress that schools should refrain from basing important decisions like who gets promoted or graduates solely on test scores, and called for more exploration of the unintended consequences of high-stakes exams. Teachers in the inner cities, where many children are being held back for failing the tests, worry that these exams are overwhelming their already overcrowded and understaffed classrooms. Suburban homeowners

have more bottom-line concerns; they fear that dismal test scores will lower home values. For now, those worries will persist. Testing opponents have scored small victories in places like Wisconsin, but momentum is on the side of reformers. As kids return to classrooms this fall, the new exams will be part of the curriculum.

At Madison High School in Houston, the tests have already brought an innovation that makes teenagers cringe: Saturday classes. In 1990 Texas replaced its old tests with a tough new one (its acronym: TAAS); students who failed wouldn't graduate. Early results were abysmal. Madison principal Warner Ervin remembers when

# **What Parents Can Do to Help Their Kids Pass**

Most parents are understandably anxious when they hear that their child has to take a highstakes test. Here are some things parents can do to keep everyone in the family on course:

1. A good vocabulary is essential for passing most standardized tests, so read to your children early and often. When they read on their own, encourage them by creating a quiet reading spot in the house and making regular library trips.

2. Learn everything you can about the test your child will be taking. How will the results be

used? How much class time will be taken up in test preparation? 3. The night before the test, make sure your child gets enough sleep. Stay calm yourself; he's probably anxious and needs reassurance.

4. If the results concern you, seek advice from testing experts. Teachers and guidance counselors are obvious resources.

Also check out schools of education at local universities.

5. Remember that even the best test is just a snapshot of your child at one particular point in time. It's not the whole picture. Success in life is dependent on many qualities that can't be tested, including creativity, determination, ambition and luck.



dozens of seniors failed. Students were crushed, parents were irate, teachers embarrassed. "It was difficult for everyone," Ervin says. So in 1997, Ervin began requiring every failing kid to attend tutoring sessions, some held on Saturday. The year before the tutoring began, 57 seniors failed; last spring the whole class passed. Results are also improving statewide. Last spring 78 percent of Texas students passed the test, up from 53 percent in 1994. Education is certain to be a key issue in the presidential race, so expect Gov. George W. Bush to tout this track record.

Other states can boast of their own success stories. Take 9-year-old Steven Ip of

Brooklyn, one of 17,591 third graders who failed the high-stakes test given to New York City kids for the first time last winter. Steven, whose parents emigrated from China, has solid math skills, but because of his limited English ability, he scored in the 11th percentile on the reading test. So like a record 37,000 New York City kids, he faced mandatory summer school; if he failed his retest in August, he'd be forced to repeat third grade. During five sweaty weeks in a classroom at P.S. 241, teacher Maria Teresa Maisano worked with Steven and seven other students. They read books in class and for homework, learning how to ask questions and find key ideas. When test day

TOUGH LOVE: Houston principal Warner Ervin watched dozens of seniors fail a difficult new test, but tutoring made the difference

arrived, Steven felt prepared. Like roughly 60 percent of the summer students, he passed the exam and can start fourth grade. The city's school chancellor, Rudolph Crew, has been blasted for retaining kids and mandating summer school, but he's standing firm. "This is high anxiety—it's not for the meek of heart," he says. "But I think it's the right thing to do."

Other educators aren't so enthusiastic. At Santa Monica Boulevard Elementary in Los Angeles, the lilting sounds of Spanish

# Making the Grade: How the States Stack Up in School Reform

In the last decade, reformers have tried to improve the quality of schools by making them more accountable. State politicians are mandating what children should learn in each grade, and meting out rewards and punishments. A state-by-state comparison:

Assessment: Does the state have tests for measuring student achievement?

Report Gards: Does the state have a report card for each of its schools? Ratings: Does the state assign ratings to schools or identify lowperforming schools? Rewards: Does the state provide monetary rewards to successful schools?

Assistance: Does the state provide assistance to schools it names low-performing?

Sanctions: Can the state close, take over or reconstitute failing schools?

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SOURCE: EDUCATION WEEK

SEPTEMBER 6, 1999 NEWSWEEK

CLASSROOM REBELS: These Chicago student: have become anti-testing activists, protesting a battery of standardized exams

fill the playground. But in teacher David Levinson's fifth grade, as in all other California schools, classes must be taught in English. For 31 of his 32 students, English is a second language. "The scores for most of these kids are low and it's not too hard to figure out why," says Levinson. "These tests are extremely unfair." But they're the law, and as a consequence they're beginning to drive the curriculum. "We spend a lot more time teaching to the test and a lot less on the kind of hands-on, learn-by-doing teaching we did in the past," says the school's longtime principal, Albert Arnold. "My teachers are very frustrated, and kids pick up on that." They'll be more frustrated next year when, for the first time, students who fail the test are held back.

California's on-again, off-again testing regimen shows just how messy the transition to exam-driven reform can be. Until the late '80s, California's schools were topnotch. Then in the early '90s, a sinking economy, political bickering over education reform and a growing immigrant population set them back. So the state devised a new test, the California Learning Assessment System. But critics attacked essay questions as too subjective to be fairly graded, and reformers who favor a back-to-basics approach lobbied for more focus on the three Rs. By 1994, the CLAS was dead, and students went untested for three years as legislators debated new standards. Most experts urged them to design a customized exam that tests exactly the skills the state's kids should be learning, instead of an offthe-shelf national exam. When standards, curriculum and tests are aligned through the made-to-order tests many states are adopting, "teaching to the test" can become a positive technique, experts say. But California's leaders couldn't wait for a custom exam, so they opted to use a generic test in the interim. Experts say that's been a weak link in their reform plan. "The system in California is imperfect," says Stanford professor Kenji Hakuta. "What's needed are tests that more closely line up to instruction." This disparity is a recurring theme: experts favor a gradual, methodical transition, but political realities often force quick, crude steps to try to show improvement before the next election.

As testing spreads, experts aren't the only ones parsing the quality of exams. When Wisconsin Gov. Tommy Thompson proposed a statewide graduation exam in 1997, he had wide public support. Then parents



# 'Tests Are an Easy Way Out'

Two educators urge parents to look beyond numbers

HEODORE R. SIZer and his wife, Nancy Faust Sizer, have been on the front lines of the school reform battle for decades. He is founder of the Coalition of Essential Schools, a national network of innovative schools, and has been dean of the Harvard Graduate School of Education and a professor at Brown University. Nancy Sizer

was a teacher for 25 years. The Sizers recently finished serving as acting coprincipals of the Francis W. Parker Charter Essential School in Devens, Mass., and have written a new book, "The Students Are Watching" (131 pages. Beacon Press. \$21). They discussed the pros and cons of testing with NEWSWEEK Senior Editor Barbara Kantrowitz.

NEWSWEEK:: Are test scores a good way for parents to pick a school for their child?
THEODORE SIZER: A lot of those scores rest on very sandy soil. It's limited and often very skewed information.
We all know that some kids blossom with tests and some kids don't. And we also know that there are very few correlations between sophisticated standardized testing and long-



saw sample questions. "It scared the heck out of them," says state Sen. Bob Jauch. "They weren't sure they could pass it themselves." A strange coalition of opponents emerged, consisting of parents concerned that the tests were too tough, educators who resented the state's giving orders to locally run schools and legislators who'd rather spend the \$10 million testing budget on a tax cut. By June, Wisconsin's new test was dead.

Tales like that one give hope to the Chicago kids at Whitney Young who bucked the test last winter. Over the summer they rounded up like-minded students from other schools and named themselves the Organized Students of Chicago. They've already passed out leaflets denouncing the city's testmania; now they're planning teach-ins. The focus on the exams "just seems so totally excessive," says Will Tanzman, 17. Eli Presser, an 18-vear-old who graduated last spring but is still active in the group, says the rising number of tests makes students feel "like they're under constant jeopardy—like every single test was going to influence their life." Principal Joyce Kenner ordered the students to perform 10 hours of community service for refusing to take last year's exam. So far, they haven't served it, and may rally more students to boycott the exams this winter.

School officials are sympathetic to charges that they're giving too many tests. "Nobody wants to be test crazy ... We don't want you to be drones," says Chicago school board president Gery Chico. But like administrators around the country, he says schools need to face the reality that the status quo, in which thousands of kids languished in classes with virtually no instruction, couldn't continue. Parents like lay Rehak, who's also a Whitney Young teacher, worry their kids are suffering for the sake of the system. When his daughter faced her first high-stakes exam two years ago, "she came home panicked every night," he says. But University of Chicago researcher Melissa Roderick, who's followed 100 students at five schools through Chicago's pass-the-test-or-stay-back program, says the get-tough approach is needed, the same way financiers impose harsh, short-term measures to stabilize troubled economies. "The tests are getting us moving," Roderick says. "Over time we'll look to other things."

Perhaps. Or maybe this new breed of exam will become a defining part of school days well into the next century. Most states are only beginning to get their curriculum in sync with the new tests, so experts say it will be years before we see whether they deliver improvements dramatic enough to justify the investment. "We're in the middle of the maelstrom-it's very difficult to see which way it's going to go," says Judith Mathers, a policy analyst at the Education Commission of the States. Until then, pencils in hand, we all plunge ahead.

> With STEVE RHODES in Chicago, DONNA FOOTE in Los Angeles and ANNE GESALMAN in Houston



Exams Don't Tell the Whole Story: The Sizers in front of their charter school

You're asking for principals to be willing to sit down with a teacher and talk to him about things that have gotten out of hand. And you have to reduce the teacher's load so that they can get to know their students better and find out what will really make each student sing as a scholar.

term intellectual performance and character habits.

What's a better way to judge a school?

NANCY SIZER: If I were a parent, I would ask to follow a kid through the school for a day. Ask to see the child's work and have him or her explain it to you.

I.S.: At the Parker Charter School, we have just gone through a formal state inspection, a highly orchestrated visit arising from a very carefully prepared document set by the state authorities. We were highly accountable. A group of veteran teachers spent threeand-a-half days with us. The inspectors also talked with the parents in a way that went far beyond any test. You can hide in a test. You can't hide in an inspection.

Still, most people use scores to judge a school's effectiveness. T.S.: That's because people are lazy. They're not asking questions. Tests are an easy out. They have this façade of toughness and objectivity. Tests put no burden on the people who most often demand them-the politicians.

Do you think teachers should be tested?

T.S.: This is another example of harmful laziness. It's easy to give a test but it only tells you something at the extremes. The totally incompetent teacher and the totally incompetent arithmetic student-

they'll pop out in a test. In a good school, you wouldn't have to give a test. You'd know who's having a problem. Testing reduces teaching to mechanics, and as a principal, I don't want mechanical teachers.

N.S.: But you're asking an awfui lot of the human beings inside schools if you don't have tests.

# LOS ANGELES TIMES EDITORIALS



KATHRYN M. DOWNING. Publisher

MICHAEL PARKS, Editor

JANET CLAYTON, Editor of the Editorial Pages

# Chasm in the Schools

he expected chest-beating and soulsearching have followed the College Board report Tuesday that while overall SAT scores for white students rose one point last year, overall scores for black and Latino students stayed the same or declined. The widening gap highlights how public schools are leaving some children behind, failing to prepare them for college and economic success. But the problem is partly rooted in the failure of political and

educational leaders to move beyond pointless debates over social causes and take concrete steps to ensure that all children get equal opportunities to develop their skills.

For starters, Califor-

nia's county leaders should devote some Proposition 10 "early childhood development" dollars to help all children gain access to intellectually stimulating child care environments. Gaping disparities now exist between high-quality, high-cost child care programs that foster educational readiness and the much more common and affordable child care that amounts to little more than baby-sitting. Such disparities, says UCLA public policy professor Meredith H. Phillips, help explain why "half of the test score gap we see at the end of 12th grade is due to the gap that already exists at first grade." Some Proposition 10 money could also be used to improve the training of child care workers.

There is work that could be done right away at the other end of the spectrum too. School officials can ensure that all public high school students have equal access to college preparatory advanced placement courses. In a lawsuit filed in July on behalf

of four Inglewood High School students. the American Civil Liberties Union documented how the scarcity of AP classes in inner-city schools is depriving many smart and motivated African American and Latino high school students of access to the best public universities and to the kind of advanced education necessary to perform well on tests like the SAT.

In a 1971 case called Serrano vs. Priest, the state Supreme Court ruled that Califor-

nia's children shouldn't be subjected to unequal educational opportunities simply because they live in less economically advantaged communities. The decision forced the state to begin shifting its base

for school funding from property taxes to general state revenues. But disparities are returning in the snape of "categorical aids," such as grants for special academic projects that tend to be nabbed by highend schools. In addition, many poorer schools are being forced to divert precious academic resources into nonacademic areas like counseling and security. These inequities are more subtle than a lack of AP courses, but unless schools and political advocates begin documenting them, school districts won't be able to make forceful arguments for increased public funding.

In a recent book on educational testing, Harvard professor Christopher Jencks underscored the broad social benefit of bridging the test score gap. "If racial equality is America's goai." he wrote, reducing the gap "would probably do more to promote this goal than any other strategy that could command broad political supnort."

Falloff in SAT scores for blacks and Latinos shows that officials must take concrete steps to ensure equal educational opportunity.

LILLVIIL

# scores on SATs mixed

# 3 local districts see decline; San Juan up

By Deb Kollars Bee Staff Writer

California's graduating class of 1999 performed above the national average in math and below it on the verbal part of the SAT. according to figures released Tuesday by The College Board.

Overall, California's scores on the coilege entrance exam held steady, mirroring the national picture. In contrast, scores fell in several Sacramento-area school districts, including Sacramento City, Elk Grove and Roseville Joint Union.

High school students take the SAT (Scholastic Assessment Test) for admission to colleges and universities. The exam is designed to measure students' verbal and mathematical reasoning abilities that are related to successful performance in college. The results are scrutinized closely each year by schools. districts and states as a key measure of how well students are being educated.

In the most recent round of California results, high school seniors averaged 514 on the math part of the test, down two points from last year's average score of 516. California students averaged 497 on the verbal portion, the same average as last year. A perfect score would be 800 in each of the two catego-

Nationally, students averaged 511 in math, down a point from last year. And the national verbal average was 505, unchanged for the fourth year in a row.

The averages include scores from both public and private schools. When the scores are broken out separately, independent high schools and those with religious affiliations scored considerably higher than public schools. For example, the average verbal score was 532 for religious high schools in California, compared with 492 for California public schools.

This year, 151,636 California students took the SAT. That represents 49 percent of the estimated high school graduates, up 2 percent from 1998 and above the 43 percent who

took the test nationally.

Locally, the SAT picture was a mixed bag. In the San Juan Unified School District. which has nine comprehensive high schools. 213 which has nine comprehensive many average scores rose 4 points on the verbal

# SAT: Sacramento City chief calls scores 'lousy'

Continued from page B1

test, from 530 to 534, and 8 points on the math test, from 544 to 552.

In contrast, the Roseville Joint Union High School District, which has four high schools, experienced notable drops in its scores. The district's average score on the verbal test was 508, down 14 points from the previous year's 522. And the Roseville district's average math score was 514, down 18 points from the 1998 score of 532.

"Lousy," was how Jim Sweeney. superintendent of the Sacramento City Unified School District, characterized his district's scores, which fell significantly from last year. In Sacramento City, which has five high schools, the verbal average fell 13 points, from 478 to 465, and the math average fell 24 points, from 514 to 490.

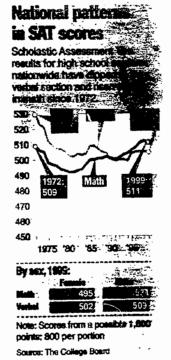
Sweeney noted that about 45 more students took the test. a 5

percent increase in test takers. "But to what extent that affected the scores, I don't know," he said, adding that he will be pressuring high schools in the coming year to boost achievement.

The Elk Grove Unified School District also reported lower average SAT scores. Elk Grove's average verbal score dropped from 481 to 475, and its average math score fell from 503 to 487.

"As an evaluation of student academic performance, the SAT scores reinforce what other measurements have shown us—we must do more to improve student performance," Elk Grove Superintendent Dave Gordon said.

The state has not yet compiled or released scores for individual districts and schools: parents should call their local districts to find out how their schools did on the SAT.



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# **Behind the SAT**

BOOK EXCERPT: Half a century ago, idealistic educators at Harvard decided that testing was the road to a classless society. They created a vast and controversial system that now serves a far different function from what they intended.

By Nicholas Lemann

Imagine an American who had been put to sleep half a century ago, and reawakened on the eve of the millennium — a modern-day Rip Van.
Winkle or, to update the

Adapted from "The Big Test: The Secret History of the American Meritocracy." (c) 1999 by Nicholas Lemann. To be published by Farrar, Straus and Giroux.

reference, Austin Powers. Surely one of the most surprising things about the country today would be the peculiar, pervasive frenzy over standardized tests, especially admissions tests and especially a test for college applicants called the SAT. It is a feature of late-20th-century America that didn't exist in the first half of the century, and that surely would have stunned the people who devised the test.

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by Robert J. Samuelson

International Edition
Special Issues

More than 2 million young people will take the SAT this year, and half as many will take a rival college-admissions test, the ACT. Many of these will pay handsome fees to an industry that has sprung up on the claim that it can improve scores on the test. Universities and high schools are widely judged according to their average SAT scores, and engage in a frenzy of their own to improve them. What students are taught in school, beginning in the primary grades, has been partly reverse-engineered to produce higher scores on the SAT and other standardized tests. Even real-estate values fluctuate with the average SAT scores of the community's schools. The test is widely believed to be the key to admission to a selective college, which in turn is widely believed to be the key to a life of prestige and prosperity. People can't help thinking of the score as a permanent measure of their innate worth.

There is a bitter national politics of the SAT, which stems from the persistent racial gap in average scores. Handing out opportunities strictly on the basis of test scores generates protests and lawsuits from minority organizations; the opposite practice, de-emphasizing scores to achieve racial diversity, also sets off lawsuits and ballot initiatives. Presidential candidates in America today have to have something to say about all this. The Supreme Court will almost certainly rule during the next couple of years on whether it is constitutional to use standardized-test results to decide who gets jobs and slots in selective schools.

Yet the test has a mysterious quality. Its original name, the Scholastic Aptitude Test, was changed in 1994 to the Scholastic Assessment Test, but now its purveyors prefer simply to use the initials, to avoid discussion of exactly what the test is meant to

measure. The story of the test's creation and its rise to totemic importance has never been told — until now. What will be perhaps most surprising about it is how different the social function the test was supposed to perform is from the one it does perform now: a device meant to eliminate an American class system has instead helped create a new one.

In the archives of Harvard University, neatly stacked and tied up in a folder inside a box, is the manuscript of a book that was never finished and never published. It is called "What We Are Fighting to Defend," and was written by Harvard's president James Bryant Conant at the outset of the second world war.

Conant was not just president of Harvard (and before that an outstanding chemist), he was also one of the architects of the entire modern American educational system, from kindergarten through graduate school; and one of the fathers of the atomic bomb; and a key planner of the reconstruction of Europe after the fall of the Nazis. His views mattered a lot. And the book proposes a sweeping, dramatic, almost utopian remaking of American society from top to bottom, in order to avoid what Conant saw as a national crisis.

Conant believed that in the half century leading up to 1940, the United States had gone from being a classless, democratic society to one that was relentlessly falling under the control of a hereditary aristocracy. When Conant was a young man, the pre-eminent American historian was Frederick Jackson Turner, who spent his career glorifying the open lands of the Old West and bemoaning the closing of the frontier — not because of its endless vistas or its romantic history, but because, in his

view, it had provided opportunity to all. But now, Conant, taking his cue from Turner, saw this most precious quality of American society slipping away.

Most historians would now regard Conant's (and Turner's) assumptions as wrong. Social mobility did not dramatically decrease in the United States between the mid-19th century and the mid-20th. But at the time Conant was writing, the country didn't seem to be functioning very well: the Great Depression had not really ended yet, as the bread lines and migrant-labor camps that were regularly shown in newspapers and magazines dramatically demonstrated. Conant, a liberal, found it alarming that socialism (and even communism) was on the rise. Opportunity and social mobility were the best ways Conant could see to forestall a national turn to the left.

Päge 1 of 6

Article Date: AUG 25 1990

# Strengthening opportunities for California students

HEN Californians voted to outlaw the use of race in public-college admissions, liberals viewed it as the end of both affirmative action and the quest for equal education for poor minority students.

But the death of affirmative action has thrown a kileg light onto educational inequality. With minority students who would once have graduated from California's elite universities being shut out. political pressure is building for the state to use its budgetary and regulatory powers to bring urban schools into line with those in more affinent communities.

The consensus for strong, state-level action has created a coalition of liberals and conservatives

and is animating even Ward
Connerly, the University of California regent who masterminded Proposition 209, which
ended affirmative action. He
now seems torn between his hatred of affirmative action and
the need to preserve a minority
presence at the elite universities
and in the professions that
draw from them.

Connerly still agitates against affirmative action outside California — and he opposes policies inside the state that might resurrect it surreptitiously. But earlier this year, he backed a somewhat progressive measure in California that benefited a few minority students by guaranteeing college admission to everyone in the top 4 percent of high school graduating classes statewide.

Connerly explained the decision with statistics that show no diminution in the quality of incoming college classes as a result. Although the measure is quite modest. Connerly's decision to back it seemed to signal that he had softened his hard-line views.

Connerly has now surprised both liberals and conservatives by endorsing a class-action lawsuit brought against the state by the American Civil Liberties Union of Southern California. He was particularly strident in the Los Angeles Times, saying of the suit "I would almost like to join it myself." An ACLU lawyer said the group was "shocked to be on the same page as Ward Connerly" but welcomed the added firepower.

The suit bears a striking resemblance to Brown vs. Board of Education and accuses California of departing black and Liatino children of the free and equal public education that the state Constitution entitles them to.

Connerty's engagement has attracted attention from California's congressional delegation and members of the state Legislature, some of whom are said to be crafting legislation based on the ACLU suit.

The complaint focuses on the advancedplacement classes that the public colleges take into account in admissions decisions and that are

### **BRENT STAPLES**

typically missing from poor schools. California law requires every high school to prepare qualified students for the public university. In addition, the state's Education Department strongly recommends that schools appoint a staff member to administer advanced-placement classes.

Affluent schools in white neighborhoods offer courses and guidance in abundance. But the poorest districts often neglect to offer them. Connerly said, "because they feel the students wouldn't take them and succeed academically. It becomes a self-fulfilling prophecy."

Proof to the contrary can be found at Garfield

High in Los Angeles, a mainly Latino school depicted in the film "Stand and Deliver." In 1976, Garfield offered no advanced-placement classes in math — but 30 students signed up for advanced-placement calculus as soon as it was offered. Ten years later. Garfield ranked fourth in the nation in the number of students who took the AP test in calculus.

In California, blacks and Latinos make up 45 percent of the high school population — but only 13 percent of the advanced-placement test takers. The shortfall of advanced-placement courses has been found to afflict rural areas as well, putting low-income whites at a competitive disadvantage when they apply

disadvantage when they apply to college. As a class-action suit, the ACLU complaint covers "similarly situated persons," which includes these rural whites.

California's education department was summed by the lawsuit — partly because the inequalities in the complaint have been taken for granted for decades. Connerty sounded like an old-style liberal, saying that state officials 'needed a gun to their heads' before they would give black and Latino Californians the education they deserved.

Connerly said he opposed affirmative action because it undermined the society's view of minority competence and because it "masked" educational inequality. His hostility toward affirmative action seemed more credible to some voters because he is black.

It will be interesting to see how the same Califormians view his appeal for closing the gap between schools that serve affinent whites and those that serve poor minority students.

In any case, Connerly needs to work as hard to redress the inequalities as he did to kill affirmative action. Having closed one door, he has a moral obligation to open another.

Brent Staples writes for The New York Times



EDUCATION

# New Weights Can Alter SAT Scores

Family Is Factor In Determining Who's a 'Striver'

By AMY DOCKSER MARCES

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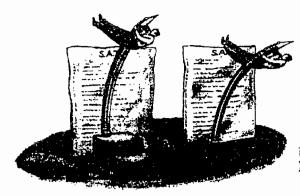
essays, assess teacher recommendations and look at SAT scores And, for the first time, they will also be able to determine whether a student qualifies as a "Striver"

ties as a Siever Strivers is a new idea from Educational Testing Service, which devises the SAT exam. It is designed to give colleges a tool for bringing social equity into the admissions process. And like race-based affirmative-auton preferences for minorities, it is sare to herome controversial.

The concept works a lot like a golf handicap. STS has come up with a statistical equation that will generate an expected SAT score for every student based on 14 different calegories, including family income, parents' education level and high-school socioeconomic mix.

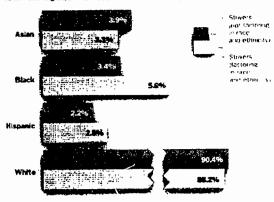
The Strivers score is the difference between the artial SAT score and the expected score. Anyone who scores 200 points higher than the expected score is considered a Striver. The score would be calculated by colleges, using demographic information on an application, and students would'at raccessarily find out the results.

Anthony Carnevale, an ETS vice president who heads the Strivers project, says that colleges will be offered both a raceband model and one that takes students are and ethnicity into account, the predicted soure for blacks and Hispanics would be lower-and their chances of being identified as a Striver will be higher-because those Phriver Vium to Prace BB, Column 3



### The Racial Factor

A new SAT measurement would identify as Sinvers as students who work 200 points above a score predicted by their snooeconomic status. Of all the Strivers with SAT scores of 1000-1200, here are the proportions that would benough to certain eithnic groups when roce is used as a predicting factor, and when it is not



# The Making of a Striver

Some of the variables that reduce SAT-score expectations, according to the ETS

### m Family:

Tow socioeconoministatus of the student is family, as measured by the education of parients, occupation, and total family income. The index also incorporates a number of measures of living standards, such as number of books in the household and kinds of electrocal appliances.

### Language: English is the student's second language.

Age: The student is two or more years older than peers

Attends inferior school, as measured by such factors as row percentage of prewous-year graduates entering a four-year college and few if any rigorous academic courses.

- School location: A public school in a depressed inner-city reighborhood or an economically disadvantaged region. The country would lower SAT et. Internations.
- Student body: Student attenos a school where more than 50% of the students receive a subsidized funch
- Mother's employment status: The student's motiver is unemployed which can be an indicator of less education and fewer economic resources for the family.
- Race and ethnicity (if the school chooses to use those factors. The student is bank, Hispanic or an American Indian.

Signores Education Viterage Smarter ETS analysis of historical foot floors on a parabolic study. How

WSJ, BI, 1 B 2 8/31/99

# Equation Determines Whether Student Is SAT 'Striver

Cunnaved From Fage Bi graups have a history of lower scores on the SAT, Indeed, SAT scores for 1999 are being released today, and the gap in scores between whites and minorities (excepting Aslan-Americans) is expected to remain

"A combined score of 1000 on the SATs is not always a 1000," Mr. Carneval? 5-, s. "When you look at a Striver who gets a 1000, you're looking at someone who really performs at a 1200. This is a way of measuring not just where students are, but how far they've come. pronounced

that have placed legal restrictions on col-leges using affirmative action in admis-sions. Colleges have always tried to take into account intangoles about a student's background in their decisions, but the Strivers concept would give time a shatisti-cal formula that weight each of these things in measuring performance on stanadmit talented minority students in a way that will withstand court challenges and laws, such as California's Proposition 209, It's also a way of trying to identify and dardized tests.

support. "Our polls show that people don't want to give the rich African-American daughter of an African-American lawyer special treatment," he says. "But the poor African-American woman from the wrong part of town and the bad school is a differ Mr. Carnevale says the idea has public ent story

society.

Sistence at the U.S. Department of Education, has created a Merit index to help colteges, dentily talented minority-group
members. The innex calculates the differ-In development for two years, Strivers will soon have competition. William J. ence between the student's SAT score and Goggin, a senior eronomist for the Advi-

ite scores exceed 22.

the average SAT score at the student's tigh school to flag students who are scor-ing above expectations. (The department is not associated in any way with the index. Mr. Coggin says.) The Indiana Education Policy Center, based at Indiana University. \*s now testing the Merit index using sity. \*s now testing the Merit index using car.... \* admissions records from a number of schools to see if the concept works.

ACT Inc., whose ACT assessment exam is the vival to the SAT, has embazized on a study to create a similar model. The Andrew W. Mellon Foundation awarded a 5390.000 grant to three University of Michigan educators to analyze ACT and SAT scores of students who took the tests in

cation. Similar measures are pending or being considered in other states. A 1996 federal appeals-court decision

creasing Mextean-Anerican and African-American admissions. Lawrulls filed by students against the University of Michi-gan and the University of Washington challenging affirmative-action programs at those schools could go to trial before the struck down as unconstitutional the University of Texas Law School's policy for inend of this year.

adopt Strivers. Public universities in Cali-fornia and Washington are unlikely to use It's not clear how many schools will the race-related Strivers model, but the

nal suggestions to market a product to schools to generate the Strivers score have been rejected. Instead, he says ETS will alert colleges about Strivers through meetings and presentations and will offer assis-ETS, anticipating some flak once the project is announced, has tried to protect itself. To avoid any appearance of a conschools Strivers scores or readjust SAT scores. So far, Mr. Carnevale says, Intertance to any college admissions office that filet of interest, ETS won't send students or

score revised to account for background wants to set up the program.
This Isn't ETS's first attempt to create such a tool, and the internal stringgies. over the eariler try illustrate some of the obstacles ahead for Strivers. In the early 1990s, BTS researcher Winton Manning created the Measure of Academic Talent, or MAT. The idea was to generate a new score, the MAT, which would be an SAT

factors.

means something totally different than a 1200 from

'A 1200 SAT score from a student in Beverly Hills

the University is commenced to State, about conducting a field trial, according to "The Big Test: The Secret Hisofficials leared the political fallout from revising SAT scores, and funds for further re search were withdrawn. Mr. Manning re tired from ETS in 1993 RTS to perform tests to see how MAT worked. He spoke with admissions officials from several state universities, including the University of Oklahoma and Iowa coming book by Nicholas Lemann. But ETS Mr. Manning received \$40,000 tory of the American Meritocracy,

pursue the idea or adequate data to test it. In creating Strivers, ETS tried to avoid some of those problems. Mr. Manning had used data supplied by students who took the SAT and answered a student question. naire about their backgrounds. Strivers ex amined data for 24,000 high-school sentors collected in the National Educational Lon gitudinal Study of 1988, a federal project A spokesman for ETS says the com-pany dldn't go forward with MAT because it didn't have the resources necessary to

that surveyed eighth graders in 1988 and did follow up studies through 1991.
A statistical model weighting various personal, family and school characteristics was then created. Students who scored at least 200 points higher than their preduted score were identified as Strivers

Colleges using Strivers would get the data necessary to calculate an experied score from individual applications. Than cial-aid forms and ligh schools. But one thing Strivers hasn't heen able to escape is representation in colleges, Strivers works best when race is one of the factors the race issue. Mr. Carnevale acknowl-edges that in terms of increasing minority

"You can be get an is from it he says

Angeles,' says a college official. I'd be interested in a student in a school in South Central Los a way to put test scores in some context." performers improve scores, they will focus on African-American students whose SAT scores exceed 1000 or whose ACT compos-1989, 1994 and 1998 The researchers want to determine the family, school and neigh borhood factors that influence test performance. To come up with a way of identify-

Bruce Walker, director of admissions at the University of Texas-Auslin, says.

"Strivers is important because it is quantifiable and applied equally to all students in your applicant pool." It's also "defensible" in court, he adds. their traditional affirmative-action leewny narrowing. As in California, voters in Washington have adopted a law barring af-These moves come as colleges find their traditional affirmative-action leewns firmative action preferences in public edu-

ent than a 1200 from a student in a school in South Central Los Angeles, says James Blackburn, director of admissions and records at California State University-Fullerton. "I'd be interested in a way to put test scores in some context." Strivers concept is being taken seriously by college admissions officials nationally.

"A 1200 SAT score from a student in Beverly Itilis means something totally differ-

Upper-middle-class Kds from superior public high schools whose purents went to college will tend be hurt by the Sirlvers scale if their SAT scores aren't exceptional in the increasingly competitive. world of college admissions, that won I sit Still, Strivers is sure to attract critics.

idea of being able to accurately determine tow a student should have performed on the SAT. well with many parents. Moreover, some graips question the

ick. Hidgation director of the Institute for Jastice, which has been highly critical of racial-preference programs around the country. How do you know what a preson should sevre!" Mr Bolick asks. The pur-T'm dublous about It," says Clint Bolpuse of the scure is to tell your person's ac-tual academic capacity

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► NATION

Sac Bee 8/27/99

# Big boo-boo on school tests

# Washington exams might have to be graded again — by hand

By Jolayne Houtz Seattle Times

SEATTLE - The good news: A large number of Washington state students got perfect scores for spelling and grammar on the test that gauges how well they meet academic standards.

The bad p ws: The results were apparently caused by an enormous scoring error.

State education officials still are investigating the situation, but the worst-case scenario is that more than 500,000 essays – two per student for 250,000 students in grades 4, 7 and 10 – will have to be rescored by hand.

Neither the cause nor the ultimate effect of the problem is clear yet, state officials said.

State schools chief Terry Bergeson sent a memo Tuesday to school districts saying that the number of students meeting standards in writing on the state's test might have been artificially inflated.

This is the second time this year that state education officials have uncovered errors involving the Washington Assessment of Student Learning.

The first error, which was caught this spring, had two fourth-grade math questions used in the widely distributed sample test appearing on the real exam.

The latest error was discovered late last week as state and district officials received their scores from the state's testing contractor.

Bergeson had planned to release WASL scores next week in what has become an annual ritual much anticipated by parents, educators and others.

Now, there's talk of withholding the writing scores and just releasing scores from the three other subjects tested – reading, math and communications – unless the problem can be corrected in time. Bergeson's office still plans to have results ready by next week.

Marc Frazer, spokesman for the Office of the Superintendent of Public Instruction, said that as soon as officials received the scores they noticed an "unusually large" number of students in all three grade levels tested had earned perfect scores for writing conventions: punctuation, spelling, capitalization, word usage and sentence structure.

The number was substantially larger than in previous years, though Frazer couldn't say how much larger.

"We're delighted to see growth, but this was too much for the course of one year," he said. "It was too significant an increase to make sense."

It's not clear yet where the error occurred, but "as of right now, we've concluded the writing scores are not valid," said Bob Silverman, the superintendent office's assessment and evaluation program supervisor. He said his agency is working with the testing contractor. Riverside Publishing, to pinpoint what happened, if the problem can be fixed or if the essays will have to be rescored one by one.

The cost of such an endeavor is another unanswered question, but "our goal is to have (Riverside) absorb this," Silverman said.

# Black Students Optimistic About Future, Study Finds

■ Education: Young people of other ethnic groups said hard work brings success. But that belief was much more prevalent among African Americans.

By JOHN BALZ

WASHINGTON—The vast maconty of African American high school students believe that if they work hard, they will have more opportunities, according to a report released Tuesday by a nonprofit cureational group.

released fuests surveyed roucational group. A majority of students surveyed roiced optimism in the old-fashioned ideal that a diligent work ethic reaps success. But the figure as significantly higher among plack students. Eighty-two occentical that they believe hard work will yield more opportunities after high school, an increase of 20 percentage points from the previous year's survey, the study by the Horato Alger Assn. found.

Horatio Alger Assn. totind.
That figure stands in sharp contrast to findings for other ethnic
groups—only 71% of white stuients and 68% of other minorities
who responded said that hard work

stillead to more opportunity.
But the optimism among African
American students was tempered
by concerns that the playing field
emains unequal for them. Only
10% of African Americans said that
all races and social classes have the
ame opportunities, compared with
0% of white students, the study

Some African American studies conolars said that the students'

:dealism is a gift that is not necessarily shared by their elders. Mary Pathllo-McCoy, a sociology professor at Northwestern University, said that the racism many African American youths may encounter is more subtle and covert than in the

"The new racism is as permicious as the old because of its invisibility." Pattillo-McCoy said. "And because students don't necessarily face those hidden problems, they are more optimistic. It takes the experience of knocking up against those ceilings and walls to understand that."

The annual survey of attitudes among American youth toward their schools, families and iturize also found that 40% of all students new crime and volence as the greatest problems is angular the country, an increase of 10% from the year before. The report surveyed more than 1,200 high school students across the nation from a wide range of ethnic and socioeconomic groups.

groups.

Pattillo-McCoy said the students' optimism was surprising, given the backlash against affirmative action programs.

programs.
But other experts said the findings are an affirmation of the economic and social improvements achieved by African Americans over the last quarter century, particularly among the middle class. Income levels, while still below those of whites, have been increasing since the 1970s, unemployment is decreasing and home ownership rates are at an all-time high of almost 47%, according to federal startistics.

"In terms of prospects and professional outlook, things are better and more promising for a significant portion of younger African Americans than they've ever been before." said David Bositis, a research analyst with the Washingion-based Joint Center for Political and Economic Studies, which tracks African American attitudes. "So you would expect things on the whole to be on the postive side. Most of the scholars said that

Most of the scholars said that drawing sweeping or concrete concusions from the study is impossible, given the small sample size of African American respondents—fewer than 200. Jennifer Park, an analyst for Horatio Alger, and that the margin of error for the responses from African American students was between 5 and 6 percentage points.

the margin of error for the responses from African American students was between 5 and 6 percentage points. Analysts acknowledged that the April shootings at Columbine High 1 School in Littleton, Colo, which took 15 lives, "definitely impacted the rise in student concerns about violence. Researchers mailed out questionnaires two days after the shootings, just as the nation fromest on he massacre. Surveys continued to be collected until May 25.

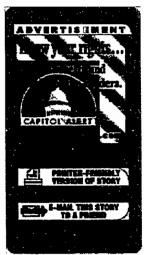
The survey found that the number of students who said they feel safe at 1 school had dropped from 44% to

School had dropped from 37%.

Vich Baker, an associate superintendent in the Kanas City, Mo.
school system, who belped snalyze
the study, said that many school
administrators are aggressively
working with local law assessment
to separore school safety by beefing
to security and making structural
thanges in school buildings.







### BEE EDITORIALS

# Peter Schrag: The case of California's festering school inequities

(Published Aug. 4, 1999)

Back in February, a group of civil rights organizations filed suit in federal court charging UC Berkeley with overemphasizing test scores in admissions and giving "unjustified preferential consideration" to applicants who take Advanced Placement courses in high school.

Because the academically challenging AP courses are offered in far greater numbers and variety in schools serving primarily white, Asian and affluent students, the plaintiffs charged, and because AP courses earn students a higher grade point average, the system discriminates against the disproportionately large number of black and Latino students who are forced to go to high schools where such courses are few, or absent.

The suit should have been brought not against UC, but against the state's K-12 education system. And last week, in a case filed in a state court and under the state constitution, the American Civil Liberties Union did just that. It's a case that could have great consequences for millions of California students -- and not just those who want to take AP courses.

The ACLU, representing a group of minority honors students at Inglewood High School, charges that California has, in effect, created a two-track, Catch-22 system. UC, in order to encourage students to take more challenging courses, raises every AP grade by a full point: Thus a perfect A, normally calculated as a 4.0, becomes a 5.0. This is why so many UC applicants enter with GPAs above 4.0.

But where schools such as Beverly Hills High, or University High in Irvine or Davis High, which are overwhelmingly white and middle class, offer dozens of AP classes in as many as 20 subjects, equally large schools such as Inglewood or Arvin High in Kern County or Woodland High, which are predominantly black and Latino and/or rural, offer no more than two or three — and in some cases none at all. Not surprisingly, the more AP classes a school offers, the more students it sends to selective colleges.

But the issue is not merely the advantages AP courses provide in university admissions, or that, as the label implies, AP courses often allow students to skip introductory college courses, thus saving themselves time and sometimes money. It's that with the AP course and the AP culture, there come a whole lot of other resources: better high school teachers, better labs and textbooks, better school libraries. Increasing the pressure to provide such courses thus increases the pressure to provide better opportunities to a lot of students who may never take an AP course.

The facile response to the disparities and the paucity of challenging courses in schools serving poor and minority students is that students aren't ready to do the work. But that begs a lot of familiar questions: If they're not ready, why not? And if we are unwilling to accept a permanent two-track educational system, who will get them ready? And if the opportunities don't exist, how will students in those schools ever be motivated? The AP problem is the tip of a much larger iceberg of educational inequality.

Which is to say that the ACLU suit goes to the heart of the of the California educational system. The named defendants include the state, the state Board of Education and Delaine Eastin, the state superintendent of public instruction. A key player who should have been named, Gov. Gray Davis, was left out, apparently through an oversight. "We just didn't think of it," said Mark Rosenbaum, the ACLU attorney who brought the case.

Although none has yet spoken for the record, it's not likely that anyone -- not the defendants, not Davis -- wants to be in the position of opposing this suit. That creates at least the chance that this case can be resolved through negotiation and legislation rather than litigation. If she were smart, Eastin might even make a separate deal with the ACLU, committing herself to precisely the sort of remedies that the suit demands.

At the core of those demands is development of a plan to provide greater access to poor, rural and inner city students to AP courses and other challenging academic programs. Given the state's low level of school funding and the difficulty of attracting qualified teachers, particularly in fields such as math and science, that's easier said than done. But the inequities are indefensible.

They're also an argument for some sort of voucher proposal that would provide public funds to permit any low-income high-school student qualifying for an AP course that's not offered at her home school to take it at any other public or private school that offers it. If California's liberal Democrats really want some leverage to get more resources for the wretched schools that many of the state's minority kids are required to attend, they could do no worse than support such a voucher.

What's certain is that the inequities outlined in the ACLU case dramatically underline the need to attract better teachers and resources to underserved schools. Earlier this spring, Assemblyman Darrell Steinberg sought to 10304 nt

address part of that problem with a bill, AB 961, that would have provided additional financial incentives to attract -- and retain -- well-qualified teachers in failing schools.

Not surprisingly, the bill has been caught in the great legislative sausage machine. In the face of a powerful teachers union that resists any sort of differential pay scale like the very devil and an inflexible governor who still believes that school reform can be done on the cheap, no such change comes easy. The bill needs tuning, but it's still on the table. And as the ACLU suit makes clear, its objectives are more important than ever.

PETER SCHRAG's column appears in The Bee on Wednesday. He can be reached by fax at 321-1996; or by letter at Box 15779, Sacramento, CA, 95852-0779.

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# Give them APs Soc Bee 8/2/99

# All high school students deserve the opportunity

The American Civil Liberties Union of Southern California has taken sharp, timely aim at one of the many fundamental and shameful inequities dividing the state's high-achieving public high schools, where opportunity and college aspirations abound, and many inner-city and small, rural high schools, which provide far fewer avenues to higher education. Specifically, the ACLU has filed a class-action lawsuit against a Los Angeles-area school district and the state Department and Board of Education, charging that the dearth of advanced placement (AP) courses offered by certain California high schools violates the students' state constitutional guarantee of equal educational opportunities for all.

In California, access to AP courses is key to acceptance in the prestigious University of California system,

which awards grades in AP classes extra points in grade-point averages that weigh heavily in admissions decisions. (The average GPA of entering freshman last year at UCLA, for example, was 4.19 on a scale in which 4.0 is considered perfect; it can be that high only because nearly all those admitted had taken AP courses.)

Yet, by the Department of Education's 1997-98 count, 129 out of 870 California high schools offer no AP courses at all. Some 333 offer four or fewer, which at big schools may not provide

ilian school	(Cable)		~	paral (%)
Center	(Carter)		1335	38.7:
Davis	(Davie)	49	1585	27
Elk Grove	(Elk Grove)	16	2133	21.8
Rosin				73.8
	(Elk Grove)	, , ,	2217	
Laguna Crook	(Elk Grove)	:: <b>::</b> ::::::::::::::::::::::::::::::::		500 .
Sheldon	(Elk Grove)	1.	1086	46.7 84
Valley	(Elk Grove)	4.	2450	42.4
Esparto	(Esparto)	5	. 245	
Folsom	(Folcom-Controve)		1827	153
Corpova	(Folsom-Condove)	5	1816	36.9
Galt	(642)	. 0	1828	23.8
Grant	(Grant Joint Union		1925	85.7
Foothill	(Grant Joint Union		1524	38.3
Highlands	(Grant doint Union		1374	42.2
Rio Linda	(Grant'sloint Union		1860	.23.7
El Dorado	(El Corado Doton)		1118-	102
Oak Ridge	(El Corado Union)	<b>6</b> 1	1991	E5
Ponderosa	(El Dorado Union)	· · · · · · ·	2071	1.70
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Marysville	(Merysydde)		3141	32.
Natomas	(Naturnas Unified	1	1282)	66.6
Nevada	(Norada Union)	5	2639.	62.
Beer River	(Newscia Linion)	~4	4 1153.T	4.6
Cottax	(Placer Lictor)	Ů.	206	73
Del Oro High	(Placer Linice)	.0:	1419	9:4
Chester	(Plarnes Unified)	~ B	330	8
Grantville	Plantas Unidea)	S. O.	- 250	208
Portola	(Papers Unified)	α -	200	15.
Ondocy	(Phones United)	· 0.	638	84:
Delta	(River Delta)	. 1	319	56.4
Ric Vista	(River Delta)	Ó	369	28.7
Rocidio	(Rockie)	. 1-	1505	14.7
Rosevilla	(Rosaville)	ź	. 1968	14.3
Granite Bay	(Rosaville)	3	1243	11.4
Oakmont High	(Rossville)	8	1336.	11.8
Woodcreek High		2	1736	27.7
Luther Burbank	(Sac.Cay)	4	2031	88.8
HUSSING TREATH	(Sac City)		3102	742
John F. Kennedy		5 7 5	2568	76.1
C.K. McClatchy		į	2328	86.5·
	(Sac City)	6	1979	£86
Sacramento	(Sec City)	6		3.5
Belia Vista	(San Juan)	2	1801	
Del Campo	(San Juan)	2	1966 954	13.7
Encina Mana Venta	(San Juan)	1 2		55
Mesa Verde	(San Juan)	2	1103	17.3
Mira Loma	(San Juan)	3	1541	31.4
Rio Americano	(San Juan)	8	1945	20
San Juan	(San Juan)		1213.	28.3
Witters	(Winters)	1	601	45.4
Woodland	(brusibooW)	1	1935	46.5

enough opportunity for all rtudents who have both a desire and the ability to enroll. In some cases, the schools cited have high populations of minority students. Others are rural high schools, often mostly white, whose rationale may be that they haven't enough students and resources to provide courses that require certain teaching expertise and materials. Still others would seem to have no excuse at all, legitimate or otherwise. Whatever the case, it isn't hard to see how attending one of those 333 schools could hinder advancement to the state's better public universities, even in light of the fact that in its admissions process UC gives some consideration to whether students had access to AP instruction.

In California's postaffirmative-action era, it is more crucial than ever to ensure that all

students have equal opportunities to prepare themselves for college. It's not only the right thing to do; it's the law. The Education Code minces no words: "It is the intent of the Legislature that each public high school shall provide the full precollegiate program, provide adequate course selections in precollegiate programs to accommodate all its pupils and regularly counsel pupils to enter those programs and courses." It would appear, given the plain intent of that language, that the ACLU has a

2 strong case.

Source CA Dept. of Education, 1997-98 data



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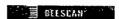


# Don't overemphasize SAT, government warns colleges

By Emily Bazar Bee Staff Writer (Published June 24, 1999)



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The federal government has released preliminary guidelines warning universities that relying too heavily on the Scholastic Assessment Test can make them vulnerable to civil rights lawsuits, prompting confusion and concern among college officials in California and nationwide.

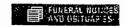
The Department of Education's Office for Civil Rights has drafted a handbook of legal decisions that provide guidance on the proper use of standardized tests such as the SAT, a widely recognized admissions tool. Many of these tests have been assailed as discriminatory, and the office contends its goal is to help educators avoid "policy decisions being made in the courtroom," said Deputy Assistant Secretary Arthur Coleman.

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The document has fueled anxiety among university admissions officials, who say they aren't sure how the guidelines will affect their policies. The more selective universities, including eight University of California campuses, generally use the SAT as a factor in admissions. The SAT is among the tests that have been accused of containing inherent racial biases.

"I think this really is a critical document for us to probe," said Gary Tudor, UC Davis director of undergraduate admissions and







outreach. "It could have some serious implications for thinking about our criteria and how we weight our criteria in relationship to first-year (college) performance."

Critics are questioning the message conveyed in the guidelines, saying the problem isn't bias in the SAT. Instead, they say, the key to equal opportunity lies in improving the uneven public K-12 system, which hasn't figured out how to raise overall achievement in low-income, high-minority areas.

"To go after test scores doesn't fix the problem," said Clifford Adelman, senior research analyst at the U.S. Department of Education, who recently concluded in a study that the rigor of a student's high school course load better predicts bachelor's degree completion than do test scores or high school grades.

"If we really care about minority students, we help them prepare better."

The guidelines also have drawn the attention of Congress. On Tuesday, a subcommittee of the House Committee on Education and the Workforce grilled officials from the Office for Civil Rights on the proposed guidelines. "The thrust of the document seems to contradict the administration's stated priority of increasing accountability in schools," said Rep. Peter Hoekstra, R-Mich., subcommittee chairman.

The Office for Civil Rights began working in 1993 on "Nondiscrimination in High-Stakes Testing: A Resource Guide," a document that focuses primarily on K-12 testing, Coleman said.

But colleges and universities have reacted with apprehension to certain passages in the guide, including one that reads: "The use of any educational test which has a significant disparate impact on members of any particular race, national origin or sex is discriminatory . . . unless it is educationally necessary and there is no practicable alternative form of assessment."

Some educators are wondering how to interpret that language and whether they'll have to give up commonly used tools such as the SAT. But Coleman maintains the guide doesn't break any new legal ground and merely serves as a compilation of existing legal and test-measurement principles that have been on the books for years.

"The notion that this is about getting, banning or eliminating higher education testing practices is absurd," he said.

For years, the SAT has come under fire for what many perceive

as racial and gender bias. Research shows that whites tend to score an average of 100 points higher on the verbal and math portions of the test than African Americans, and a smaller but still significant gap exists between whites and Latinos. Scores also tend to rise as income levels go up.

Concerned educators are adopting a wait-and-see attitude in anticipation of the document's final version, which is expected to be released in the fall.

UC Davis' Tudor said that at the least, the document spurs reflection and "moves us to rethinking the purposes and outcomes of testing."

This self-analysis comes at a sensitive time for college admissions outfits, which have been forced by the ban on affirmative action to revamp admissions policies.

"Particularly in California, where there's so much turmoil over admissions, this development . . . only adds another note of uncertainty," said Terry Hartle, senior vice president of the American Council on Education, a trade organization that represents 1,800 colleges and universities.

About 1 percent to 3 percent of UC students are admitted based on test scores alone, Tudor said. The majority, however, are selected using a handful of factors, including academic performance in light of the educational opportunities available at an applicant's high school.

Earlier this year, the state's major civil rights organizations sued UC Berkeley on behalf of eight minority students, charging that the university violated federal laws by relying unduly on standardized tests scores that favor the affluent.

"This gives a mantle of authority to our lawsuit," said Maria Blanco, regional counsel for the Mexican American Legal Defense and Educational Fund, which is involved in the suit.

According to the guide, appropriate SAT usage centers on whether use of the test is consistent with its intended purpose; the SAT, for example, was created to help colleges predict how students will perform in their freshman year.

In general, said Meredith Phillips, associate professor of policy studies and sociology at UCLA, the SAT has been a relatively good predictor in that context.

"I am a little concerned that these regulations may cause

universities to de-emphasize tests . . . and that might lead them to use more subjective standards," Phillips said. But "there is a positive side to this in that colleges will have to do more reflecting on what their goals are and how they realize those goals."

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